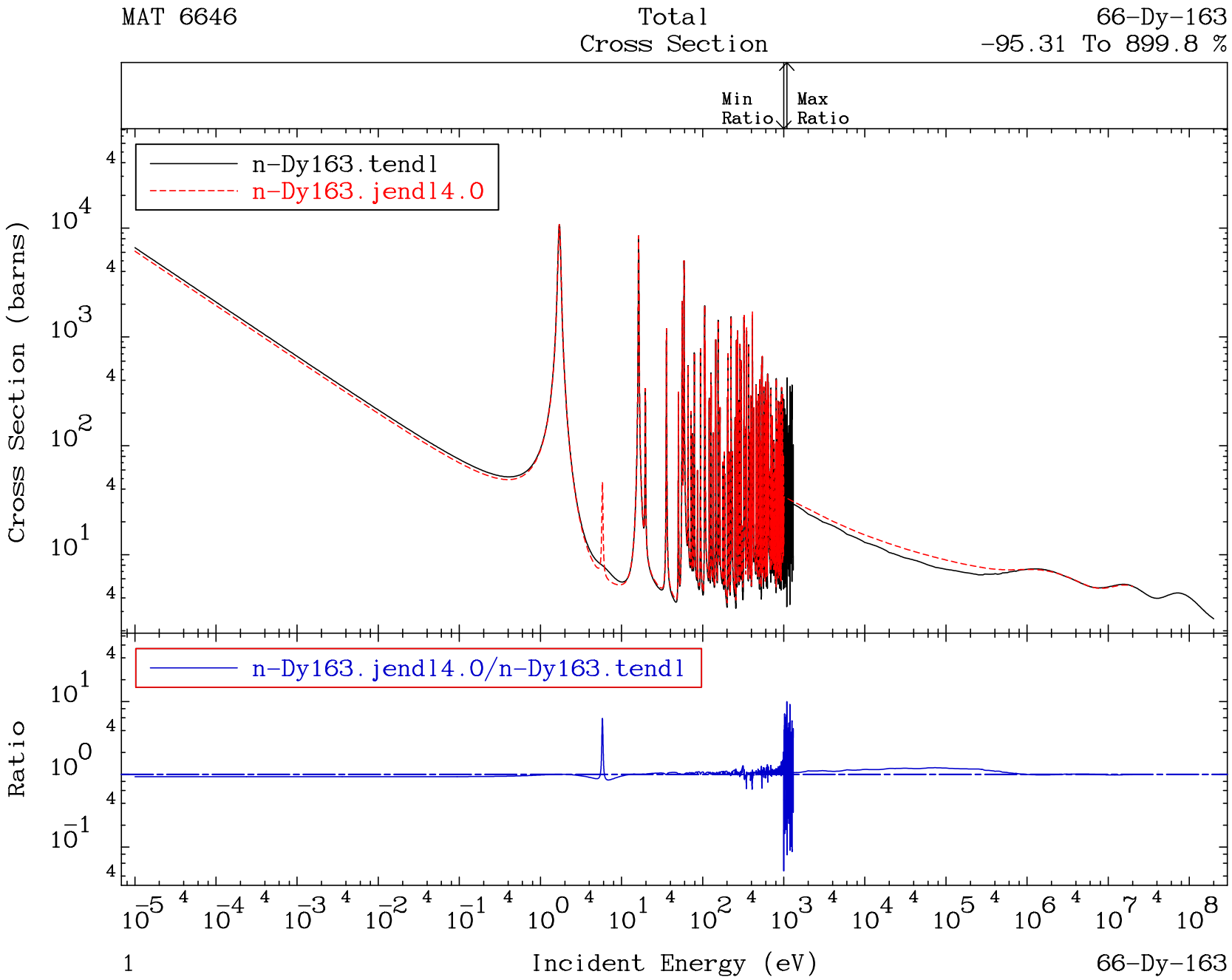
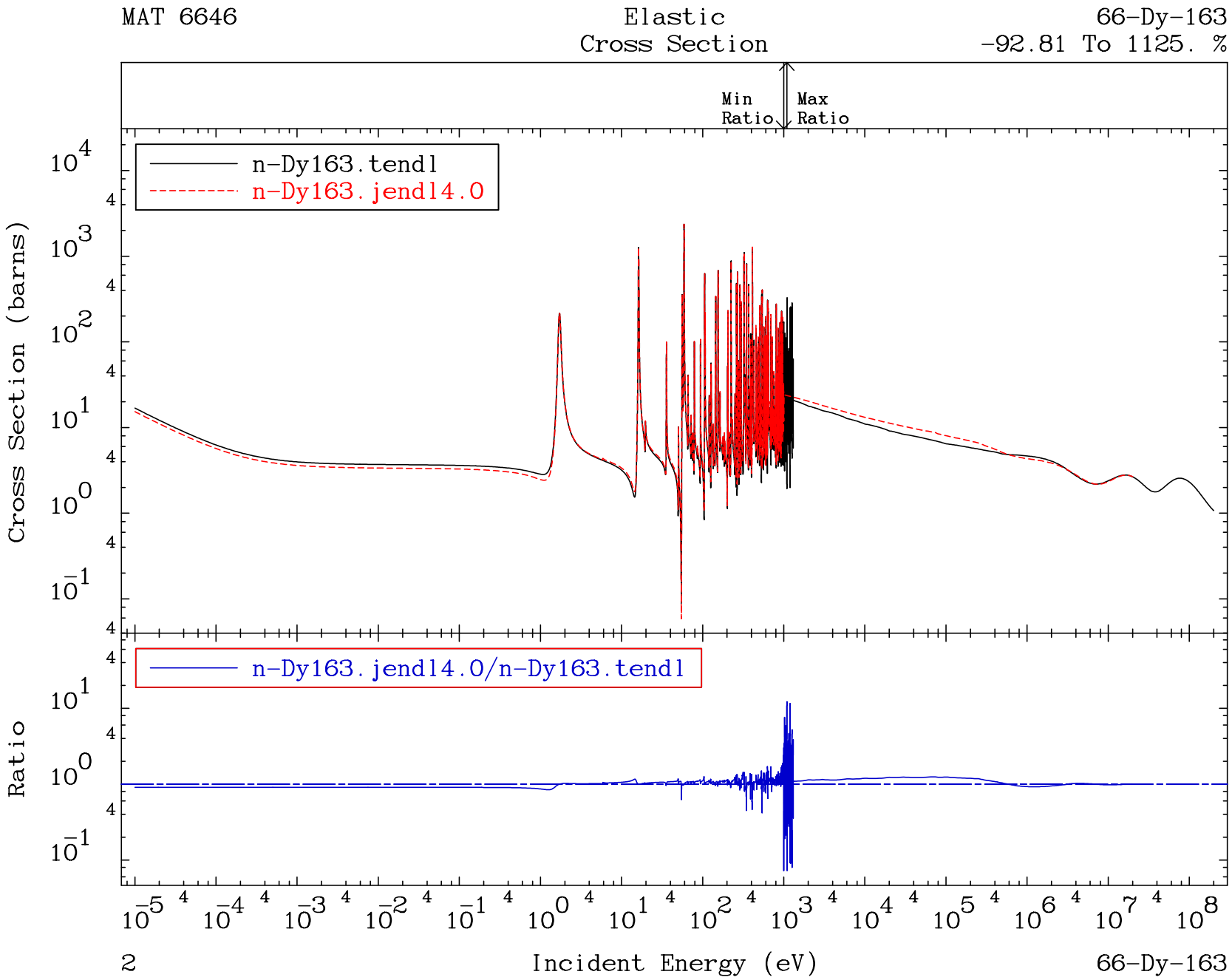
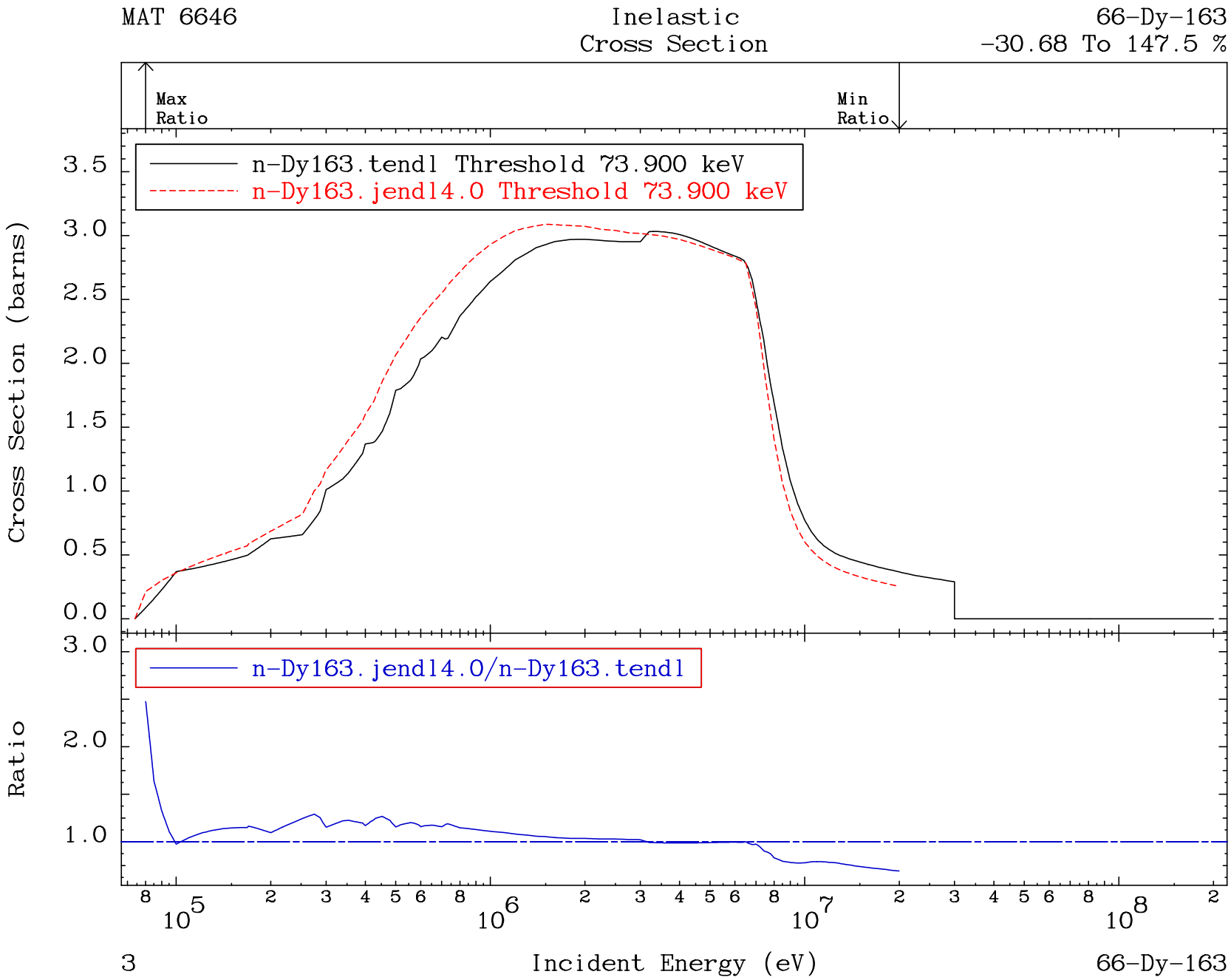
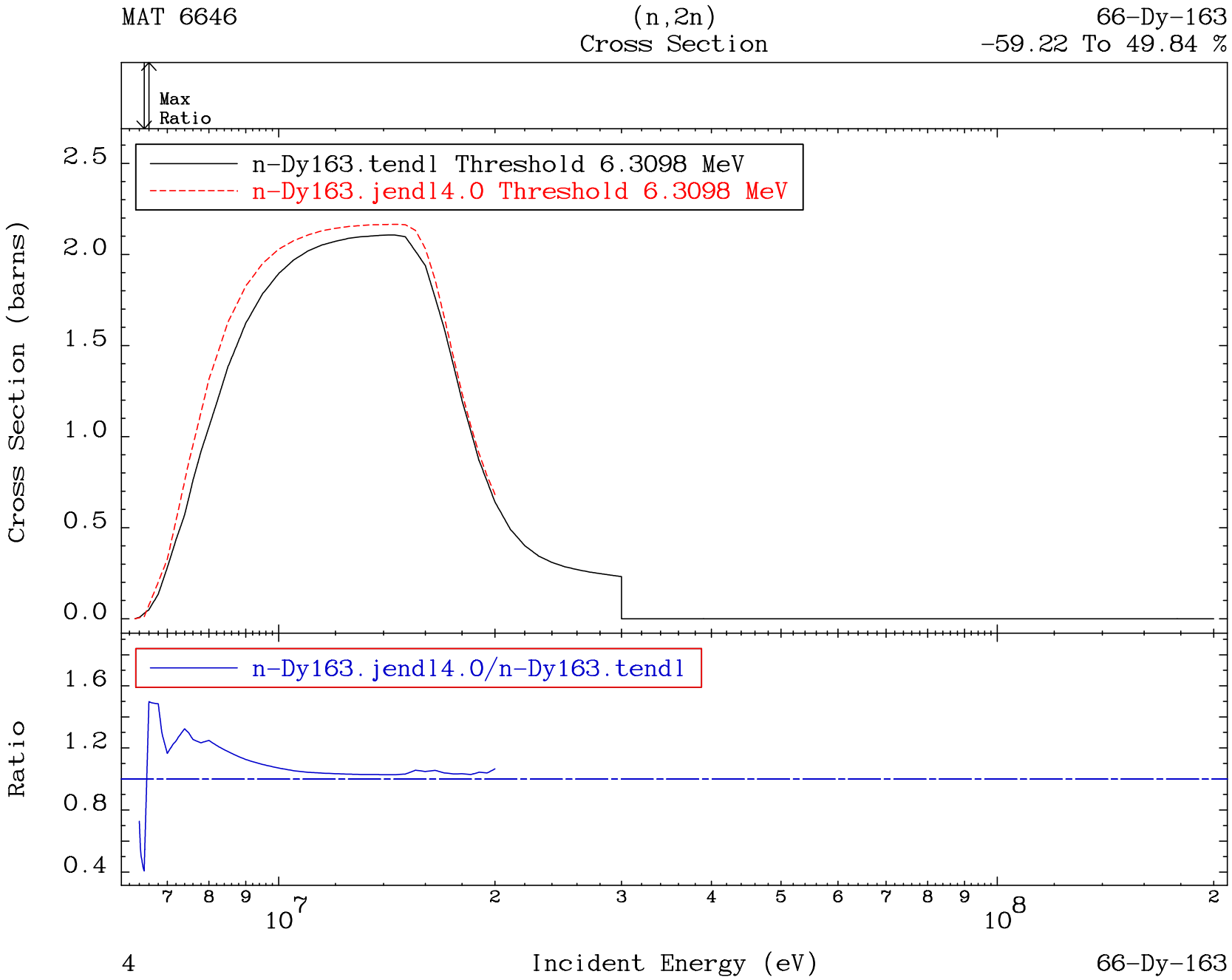
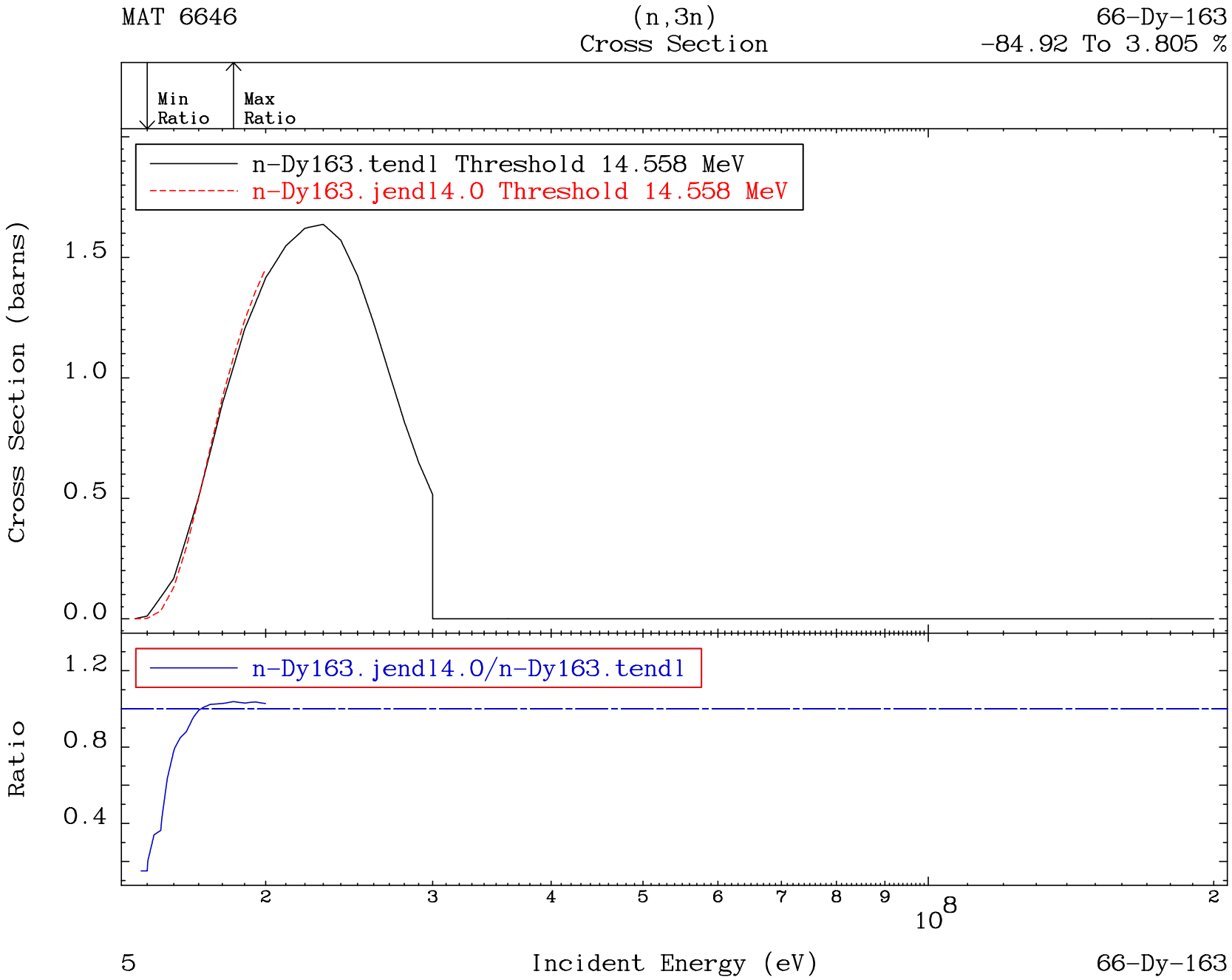
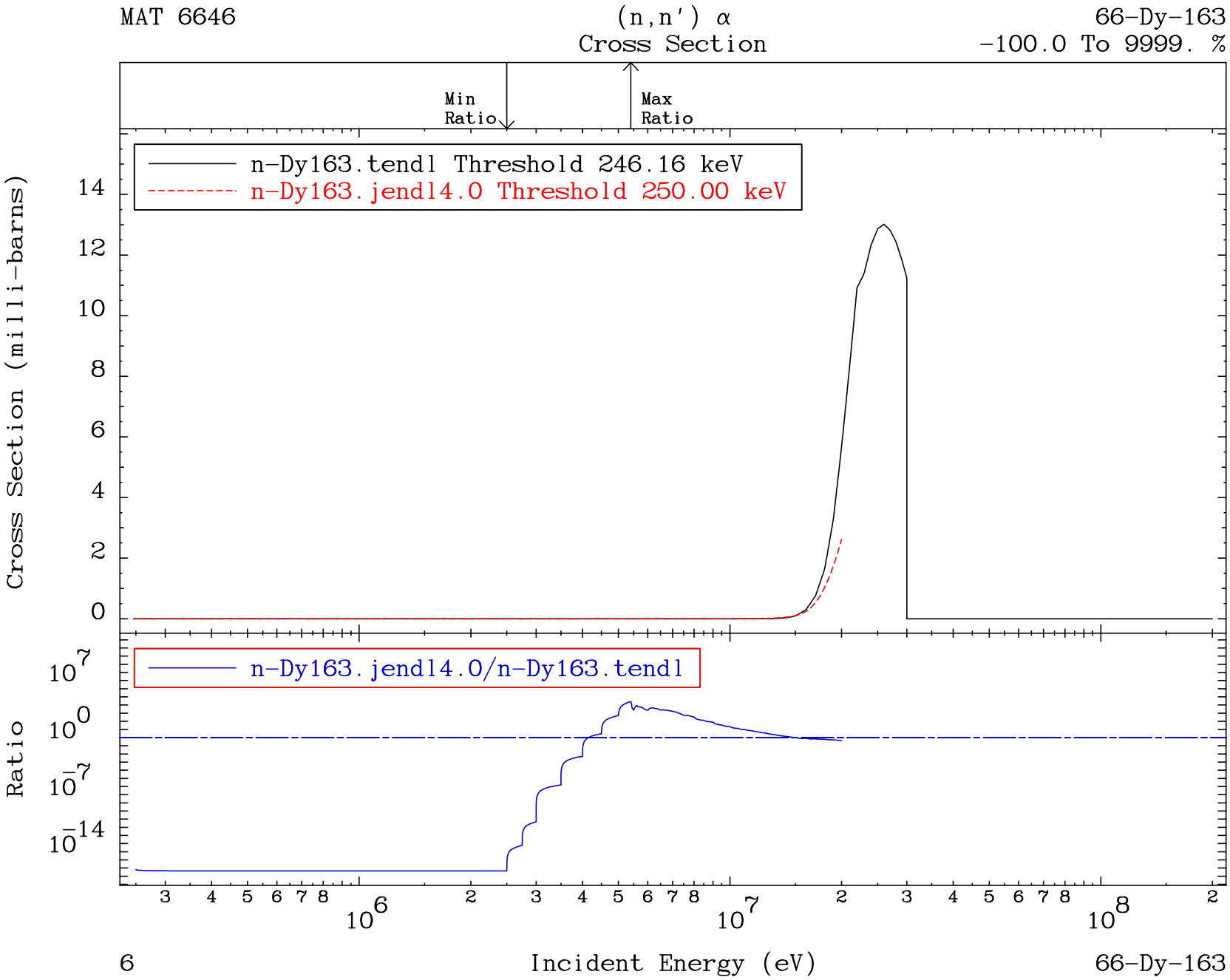

MAT 6646
Total
Cross Section
66-Dy-163
-95.31 To 899.8 %
Min Ratio
Max Ratio
n-Dy163.tendl
n-Dy163.jendl4.0
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
1
66-Dy-163

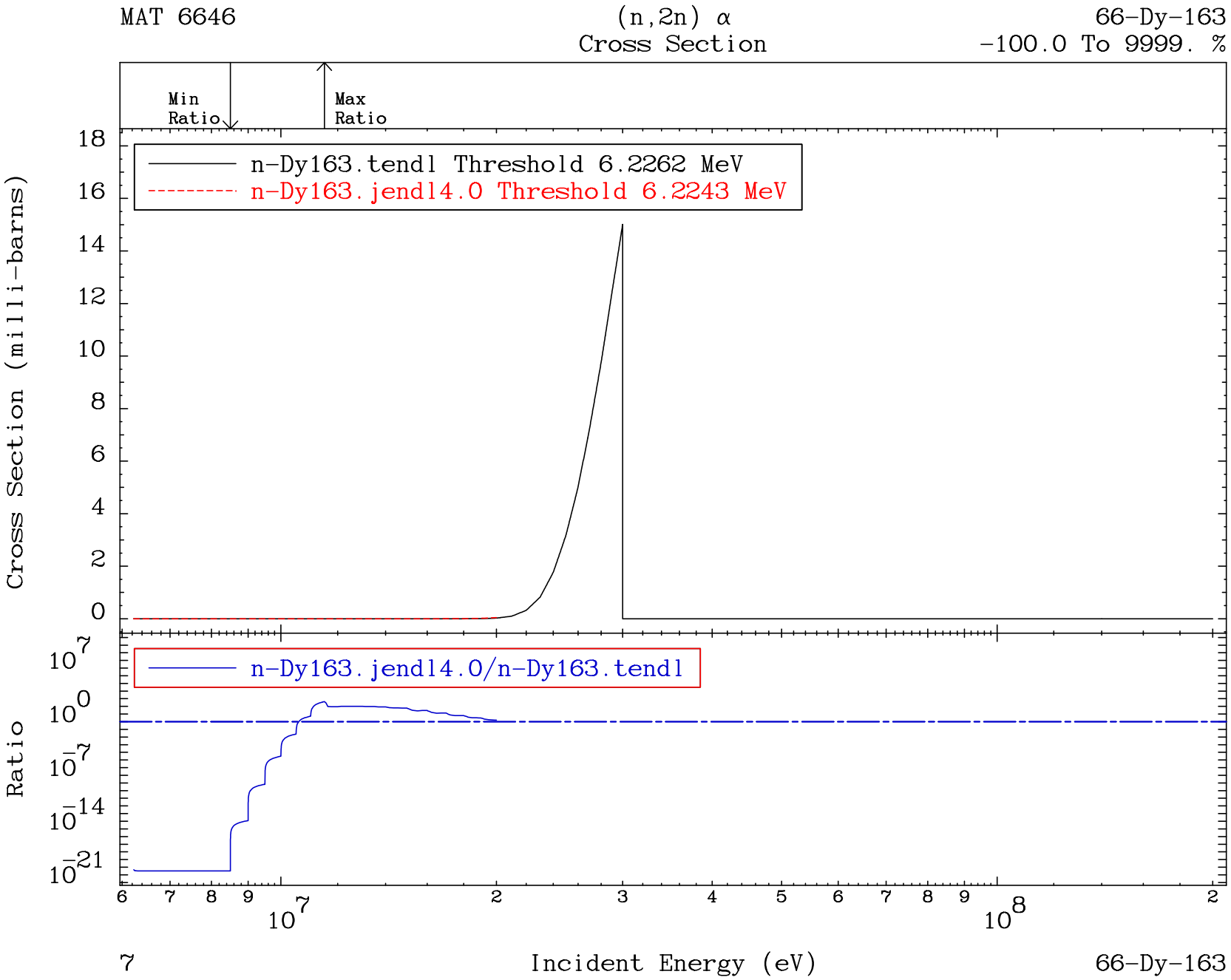

MAT 6646
Elastic
Cross Section
66-Dy-163
-92.81 To 1125. %
Min Ratio
Max Ratio
n-Dy163.tendl
n-Dy163.jendl4.0
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
2
66-Dy-163

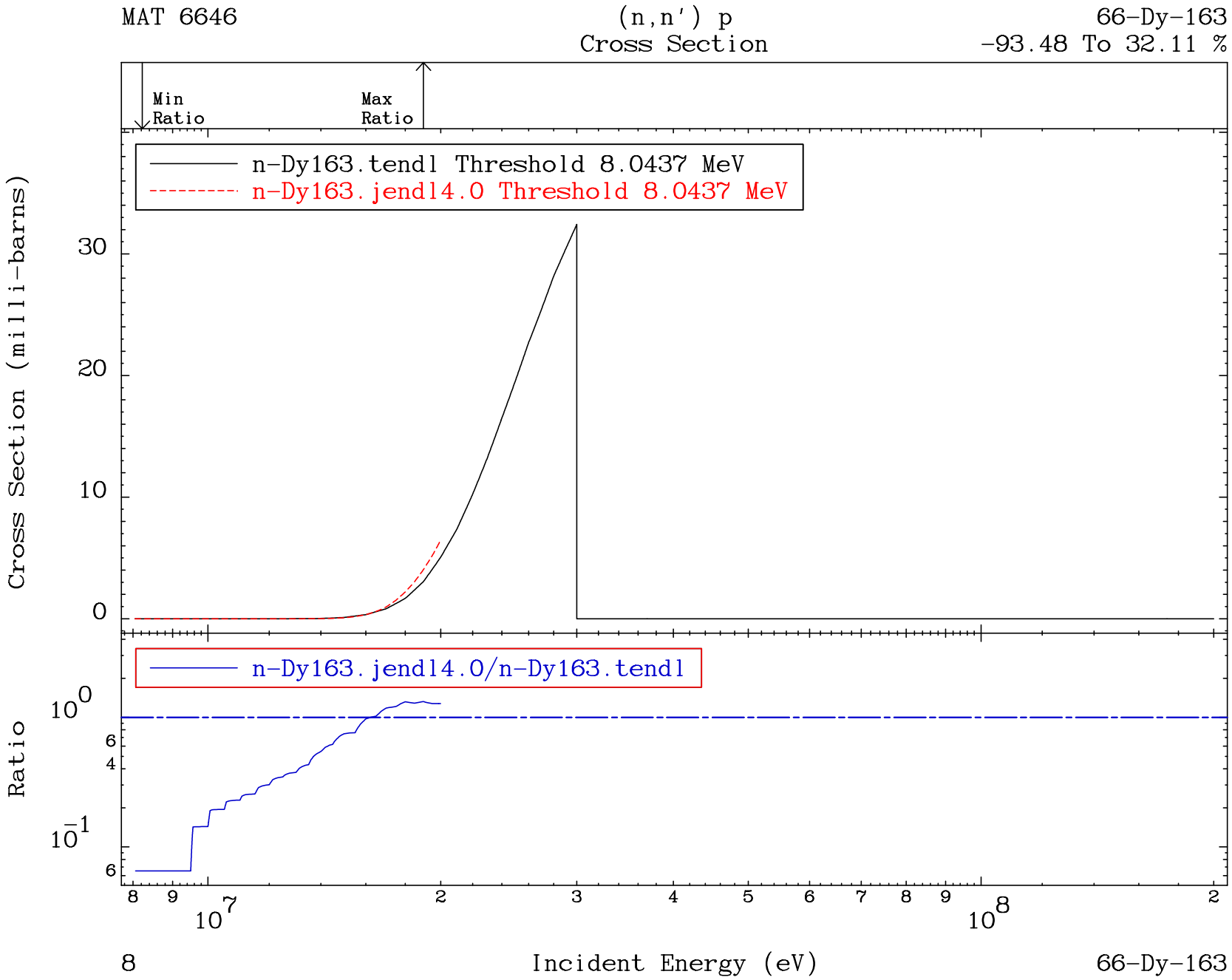

MAT 6646
Inelastic
Cross Section
66-Dy-163
-30.68 To 147.5 %
Max
Ratio
Min
Ratio
n-Dy163.tendl Threshold 73.900 keV
n-Dy163.jendl4.0 Threshold 73.900 keV
Cross Section (barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
3.0
2.0
1.0
8
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
3
Incident Energy (eV)
66-Dy-163

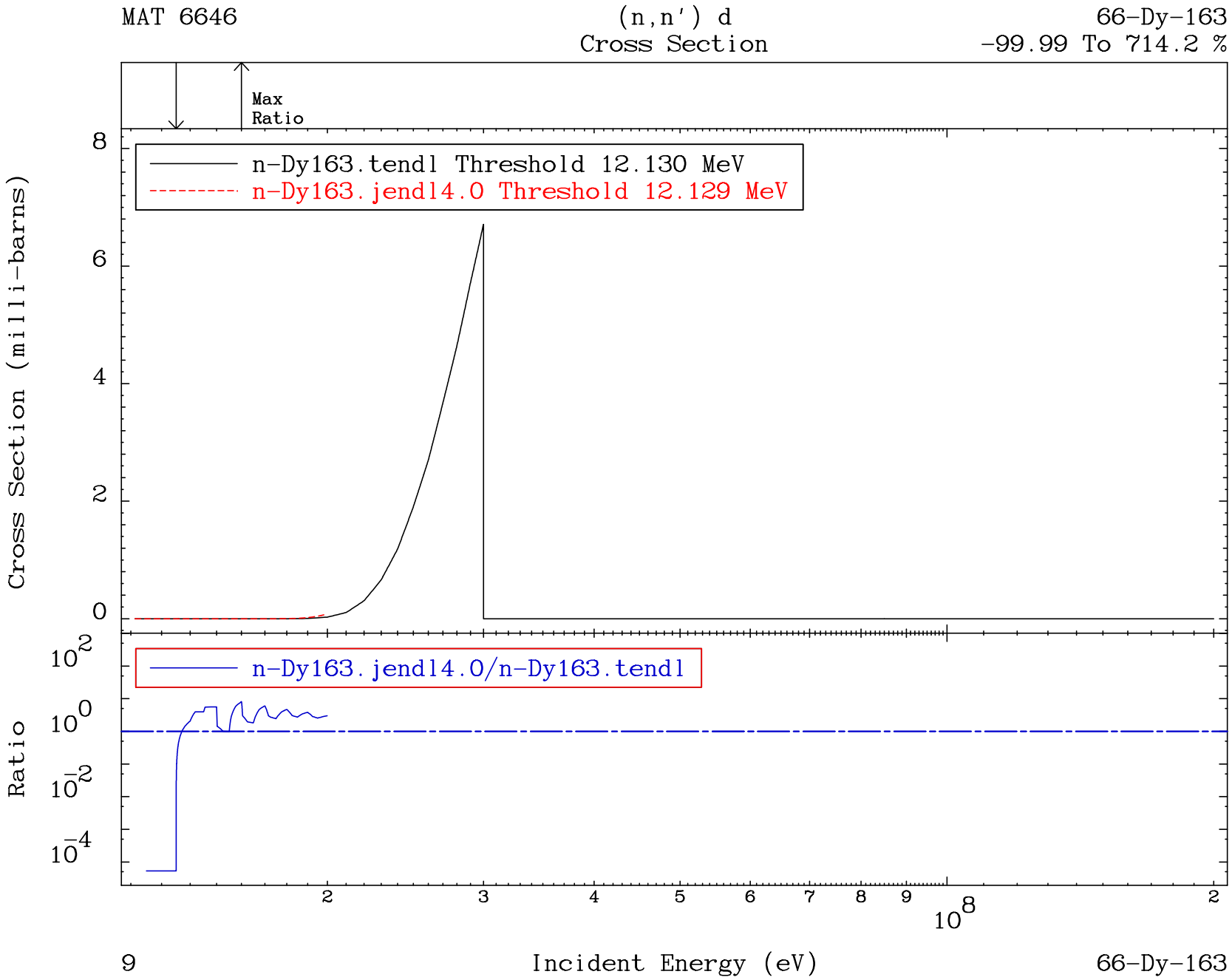

MAT 6646
(n,2n)
Cross Section
66-Dy-163
-59.22 To 49.84 %
Max
Ratio
n-Dy163.tendl Threshold 6.3098 MeV
n-Dy163.jendl4.0 Threshold 6.3098 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
1.6
1.2
0.8
0.4
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
66-Dy-163

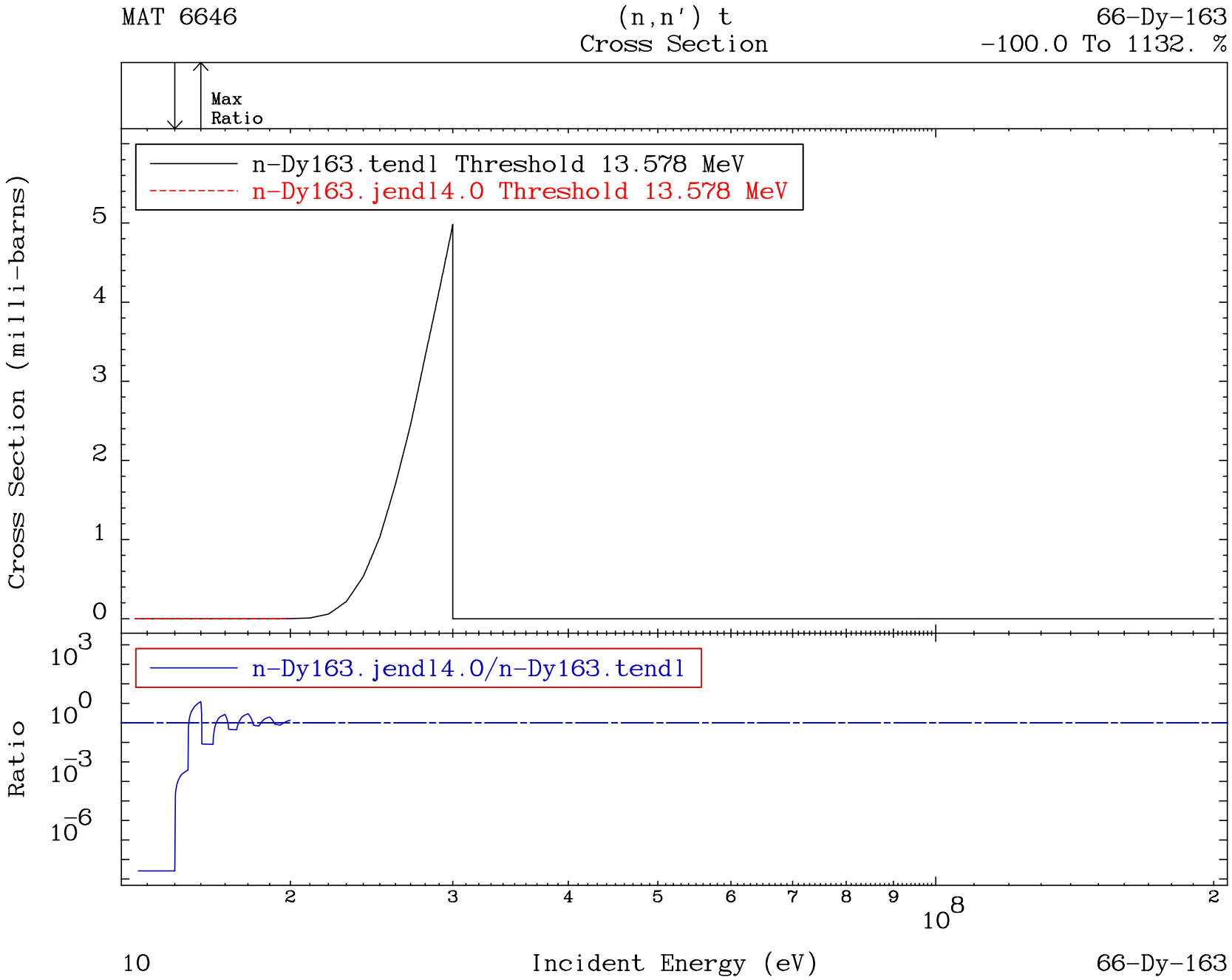

MAT 6646
(n,3n)
Cross Section
66-Dy-163
-84.92 To 3.805 %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 14.558 MeV
n-Dy163.jendl4.0 Threshold 14.558 MeV
Cross Section (barns)
1.5
1.0
0.5
0.0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
66-Dy-163

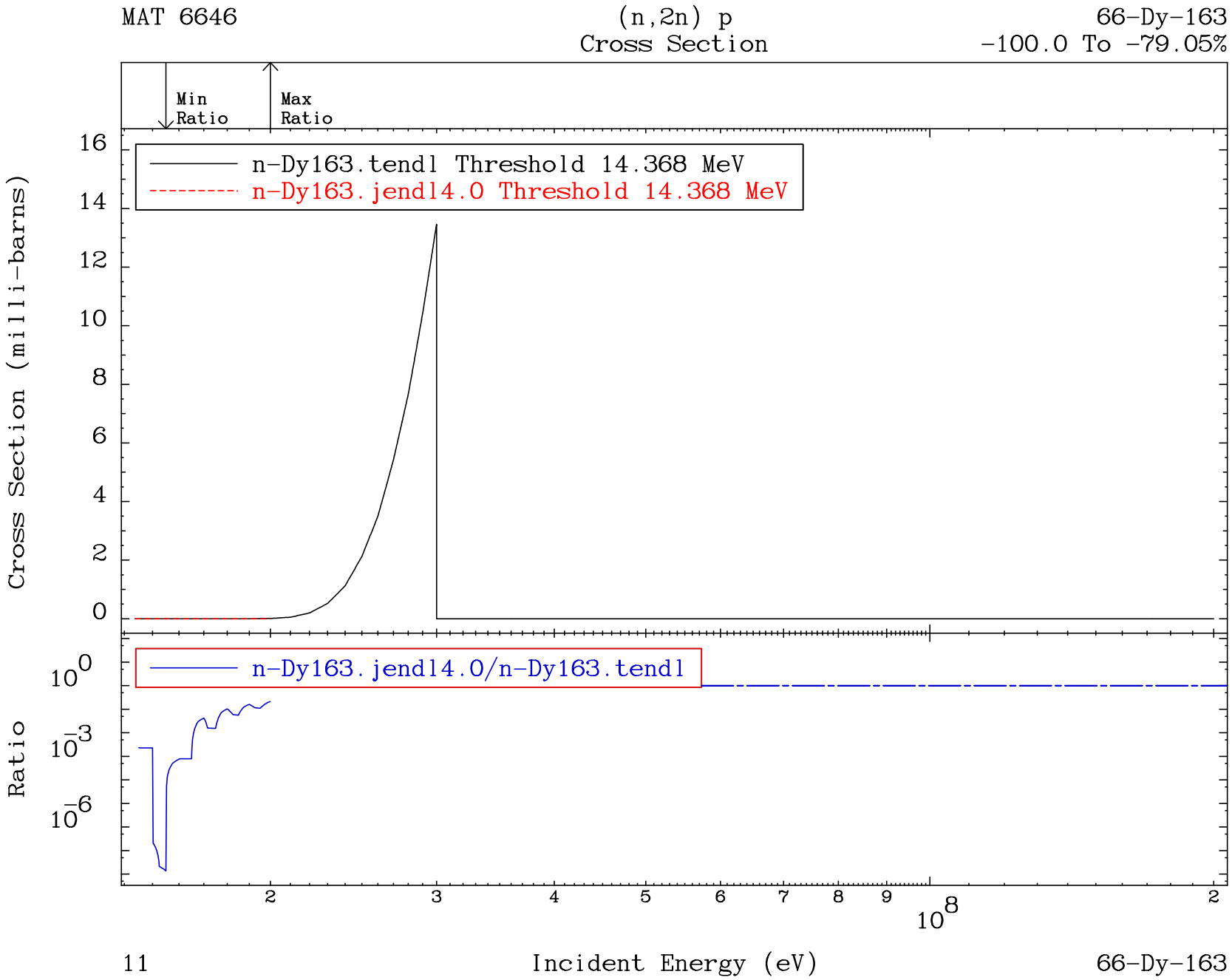

MAT 6646
(n,n') α
Cross Section
66-Dy-163
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 246.16 keV
n-Dy163.jendl4.0 Threshold 250.00 keV
Cross Section (milli-barns)
0
2
4
6
8
10
12
14
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^7
10^0
10^-7
10^-14
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
6
Incident Energy (eV)
66-Dy-163

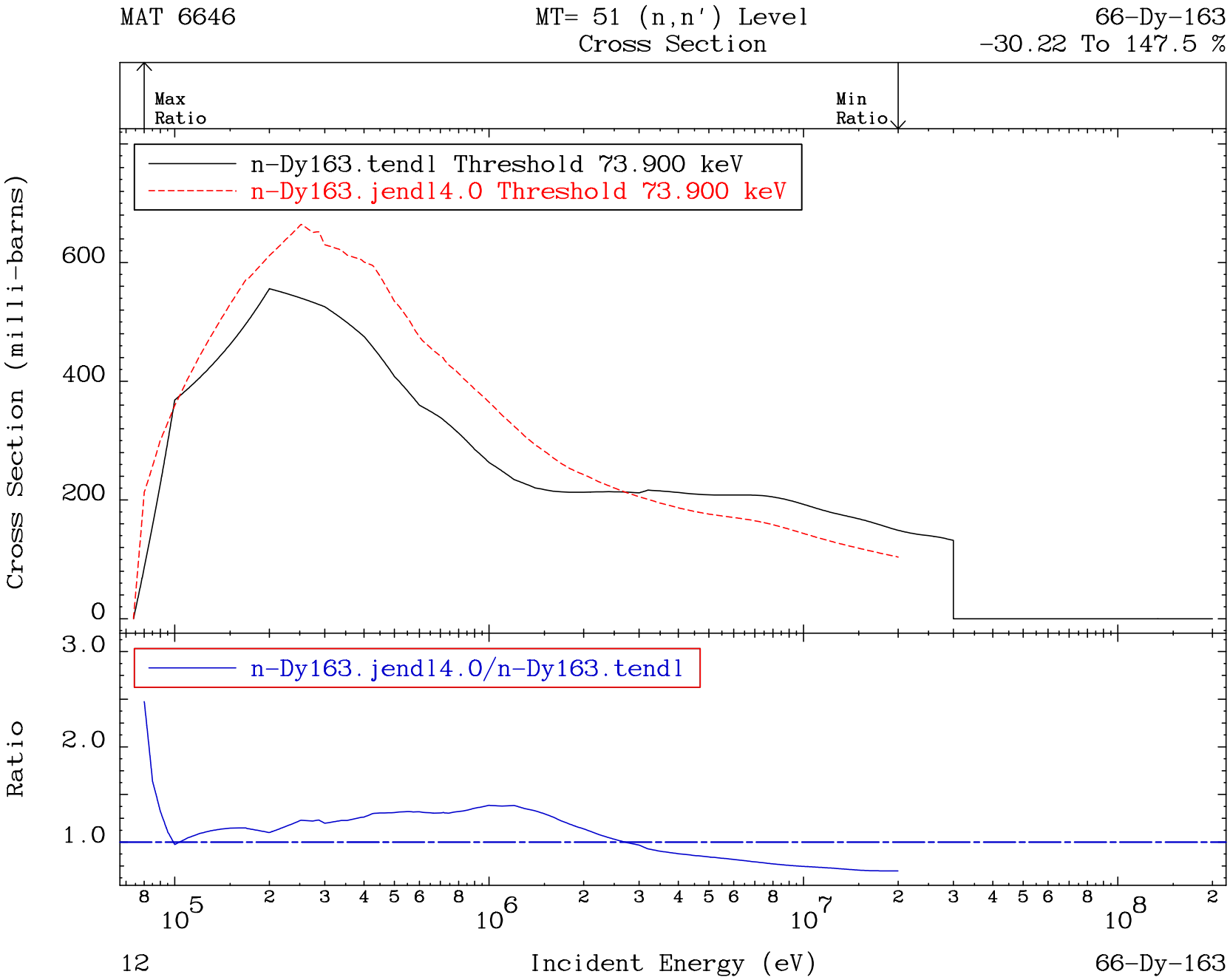

MAT 6646
(n,2n) α
Cross Section
66-Dy-163
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 6.2262 MeV
n-Dy163.jendl4.0 Threshold 6.2243 MeV
Cross Section (milli-barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
66-Dy-163

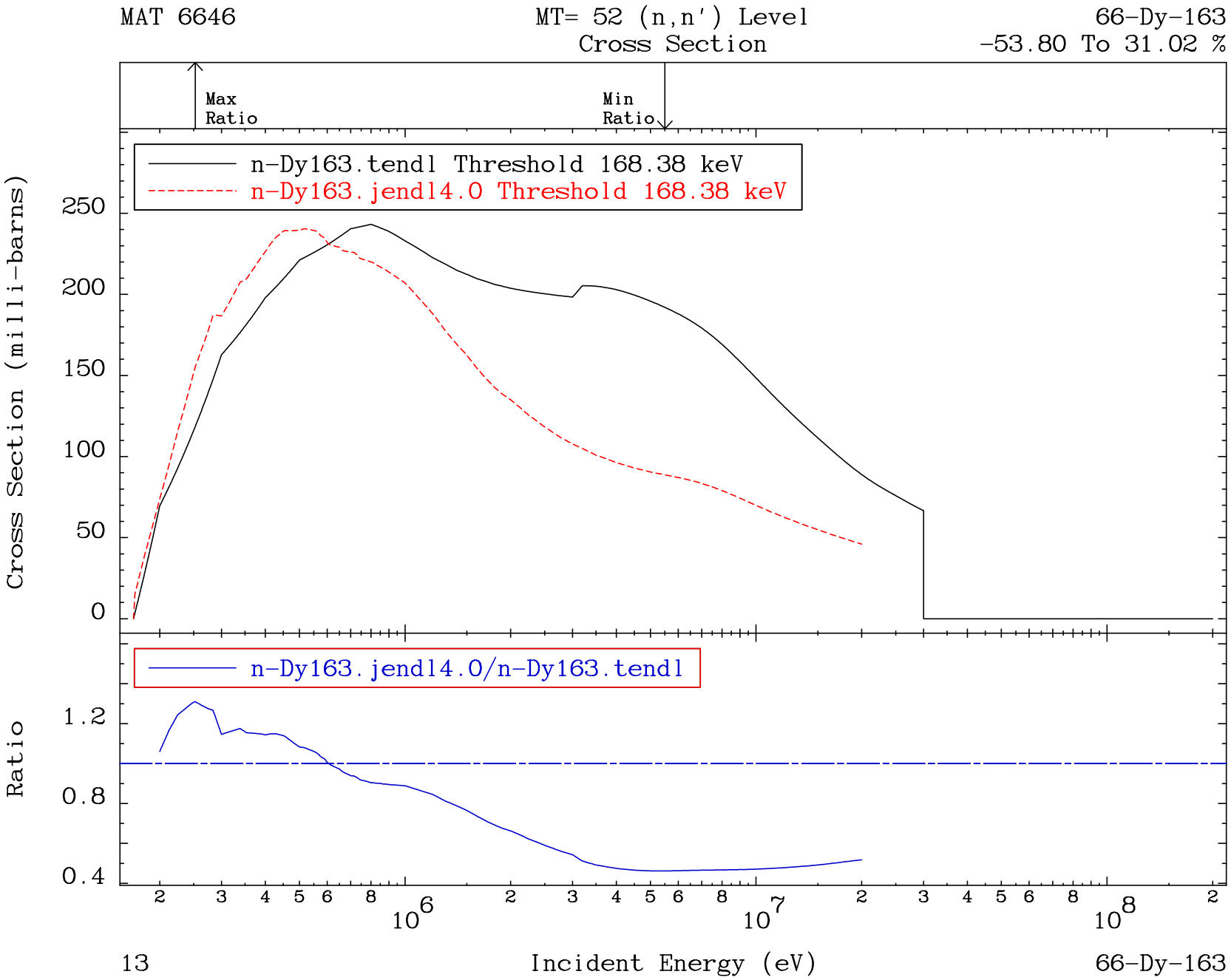

MAT 6646
(n,n') p
Cross Section
66-Dy-163
-93.48 To 32.11 %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 8.0437 MeV
n-Dy163.jendl4.0 Threshold 8.0437 MeV
Cross Section (milli-barns)
30
20
10
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^0
6
4
10^-1
6
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
8
Incident Energy (eV)
66-Dy-163

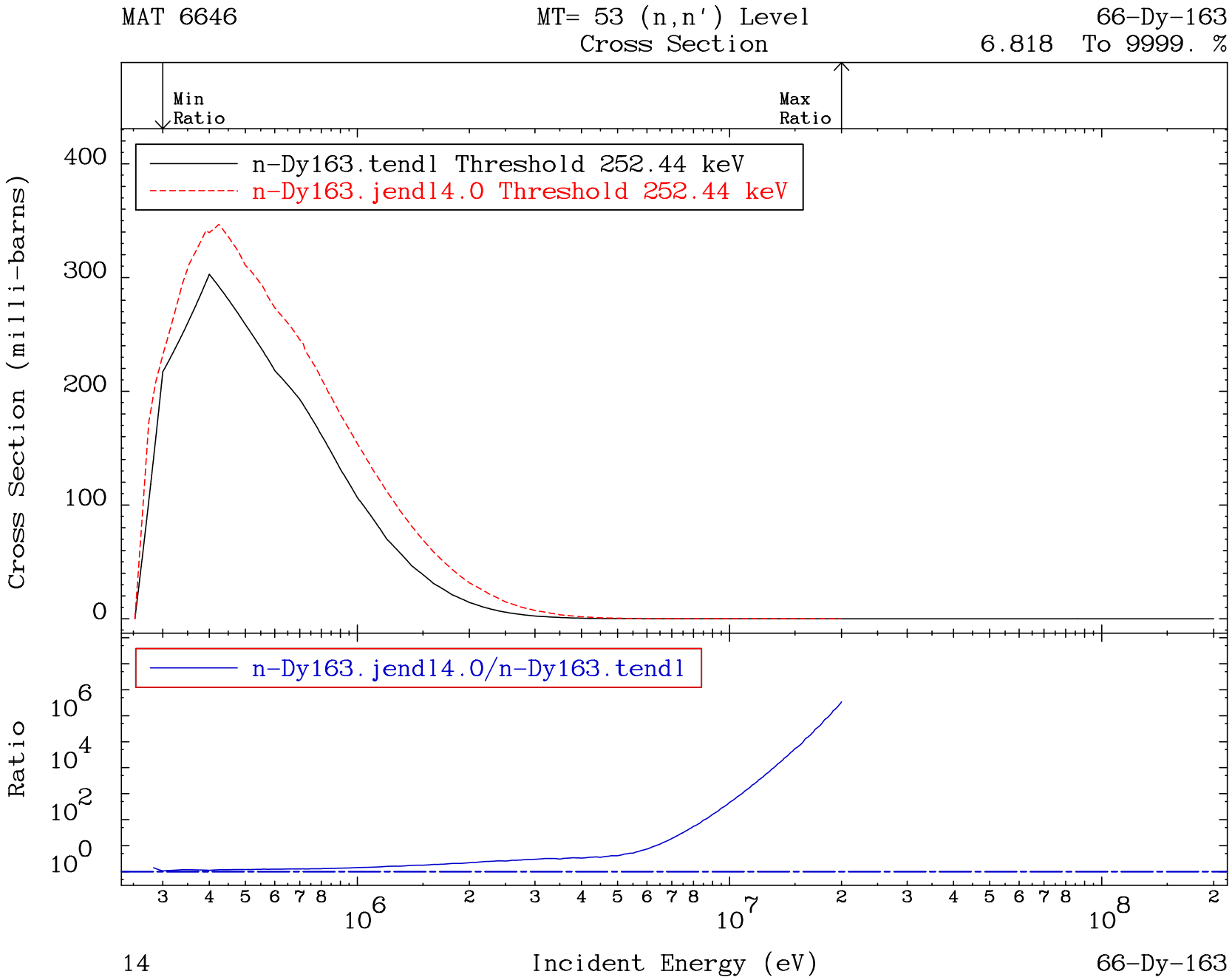

MAT 6646
(n,n') d
Cross Section
66-Dy-163
-99.99 To 714.2 %
Max
Ratio
n-Dy163.tendl Threshold 12.130 MeV
n-Dy163.jendl4.0 Threshold 12.129 MeV
Cross Section (milli-barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
9
66-Dy-163

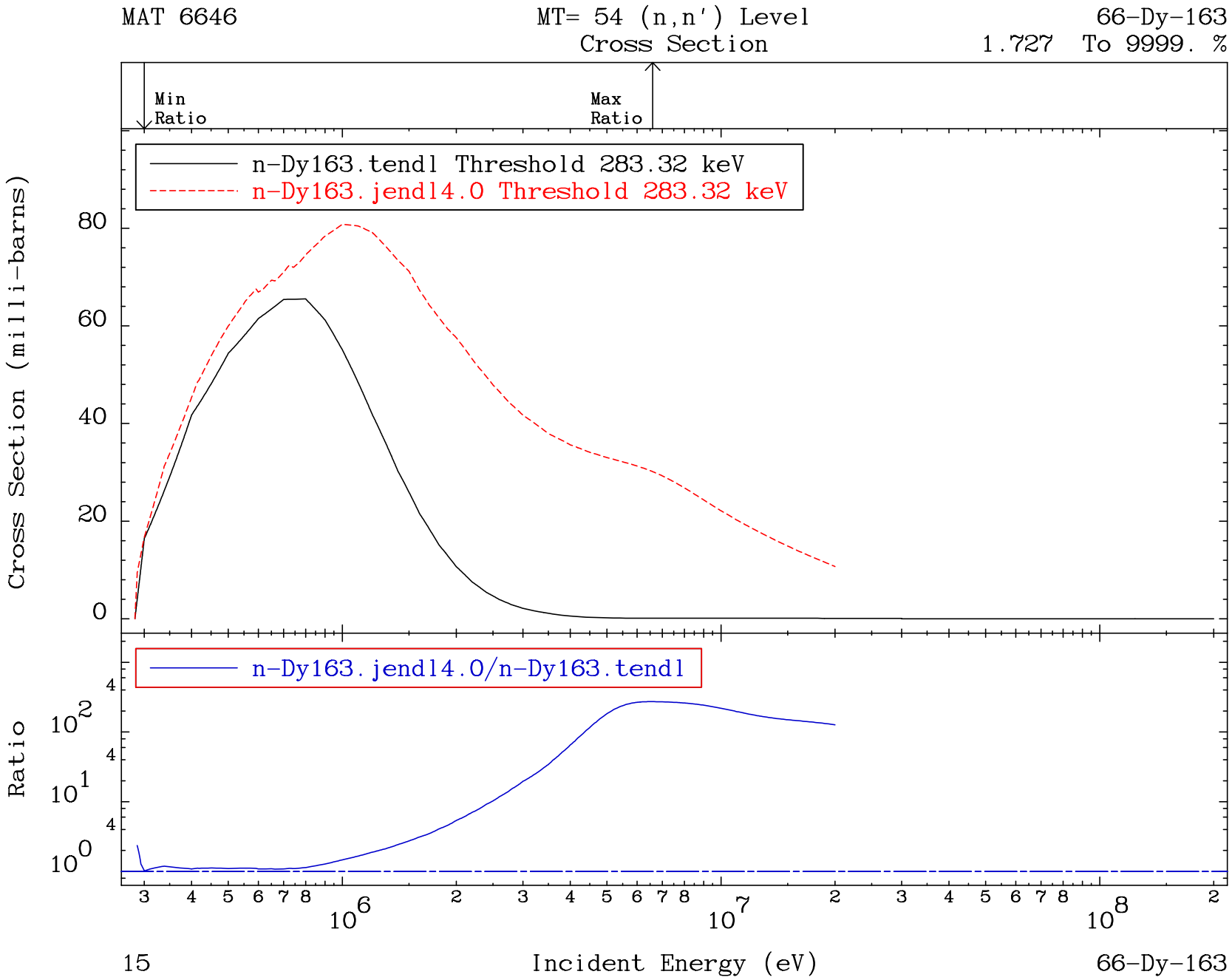

MAT 6646
(n,n') t
Cross Section
66-Dy-163
-100.0 To 1132. %
Max
Ratio
n-Dy163.tendl Threshold 13.578 MeV
n-Dy163.jendl4.0 Threshold 13.578 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^3
10^0
10^-3
10^-6
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
66-Dy-163

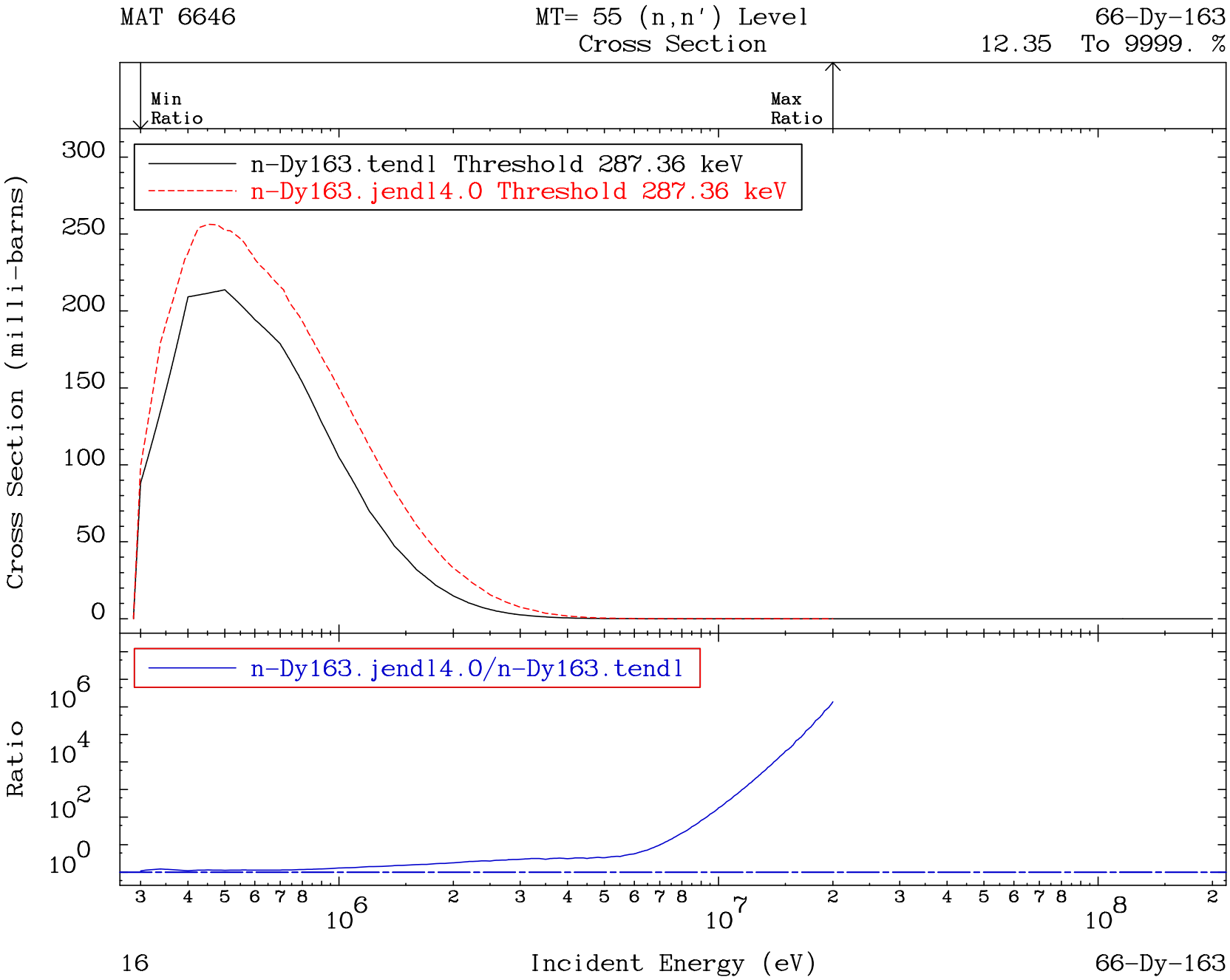

MAT 6646
(n,2n) p
Cross Section
66-Dy-163
-100.0 To -79.05%
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 14.368 MeV
n-Dy163.jendl4.0 Threshold 14.368 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
66-Dy-163

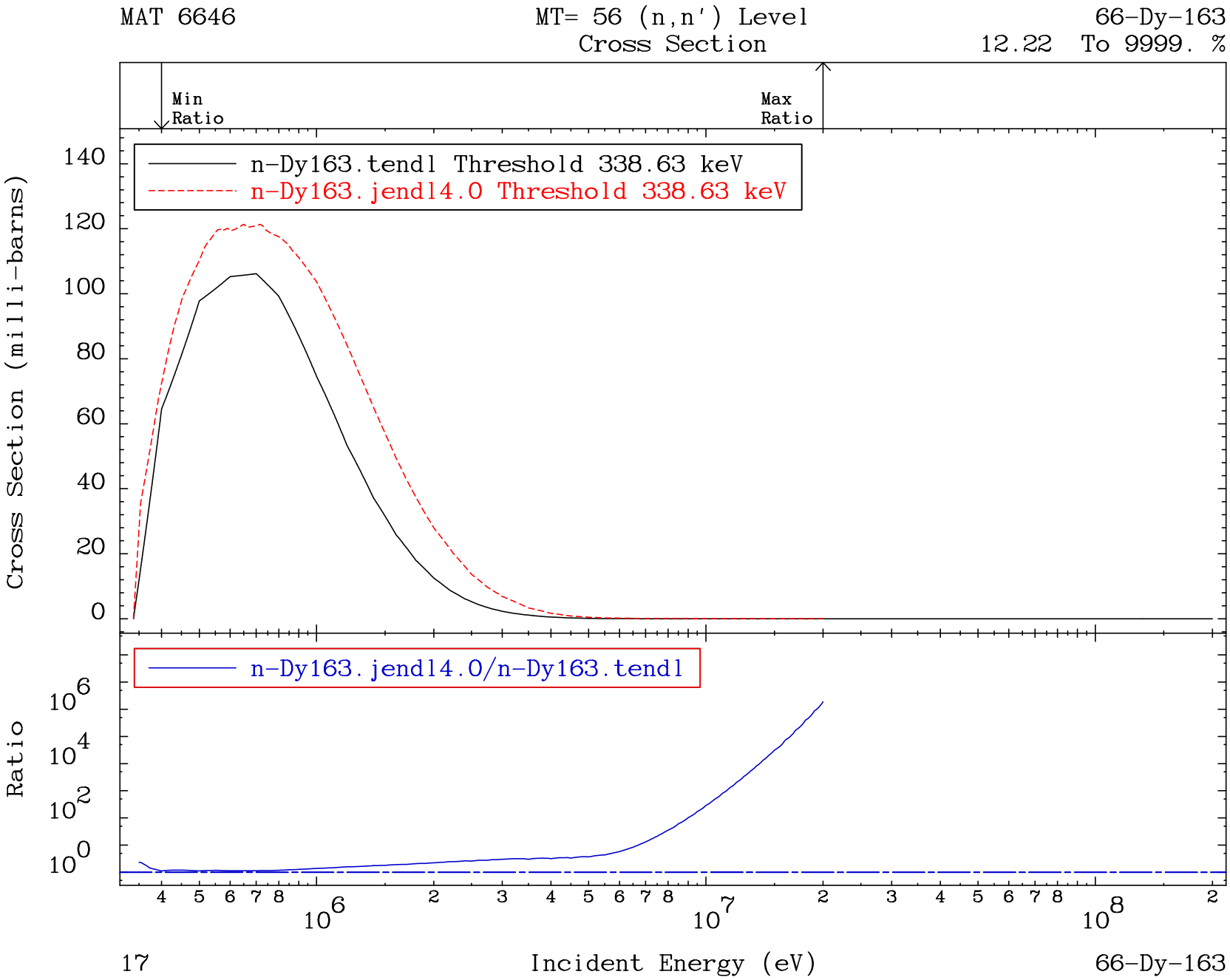

MAT 6646
MT= 51 (n,n') Level
Cross Section
66-Dy-163
-30.22 To 147.5 %
Max
Ratio
Min
Ratio
n-Dy163.tendl Threshold 73.900 keV
n-Dy163.jendl4.0 Threshold 73.900 keV
Cross Section (milli-barns)
600
400
200
0
3.0
2.0
1.0
Ratio
n-Dy163.jendl4.0/n-Dy163.tendl
8
2
3
4
5
6
8
10^5
10^6
10^7
10^8
12
Incident Energy (eV)
66-Dy-163

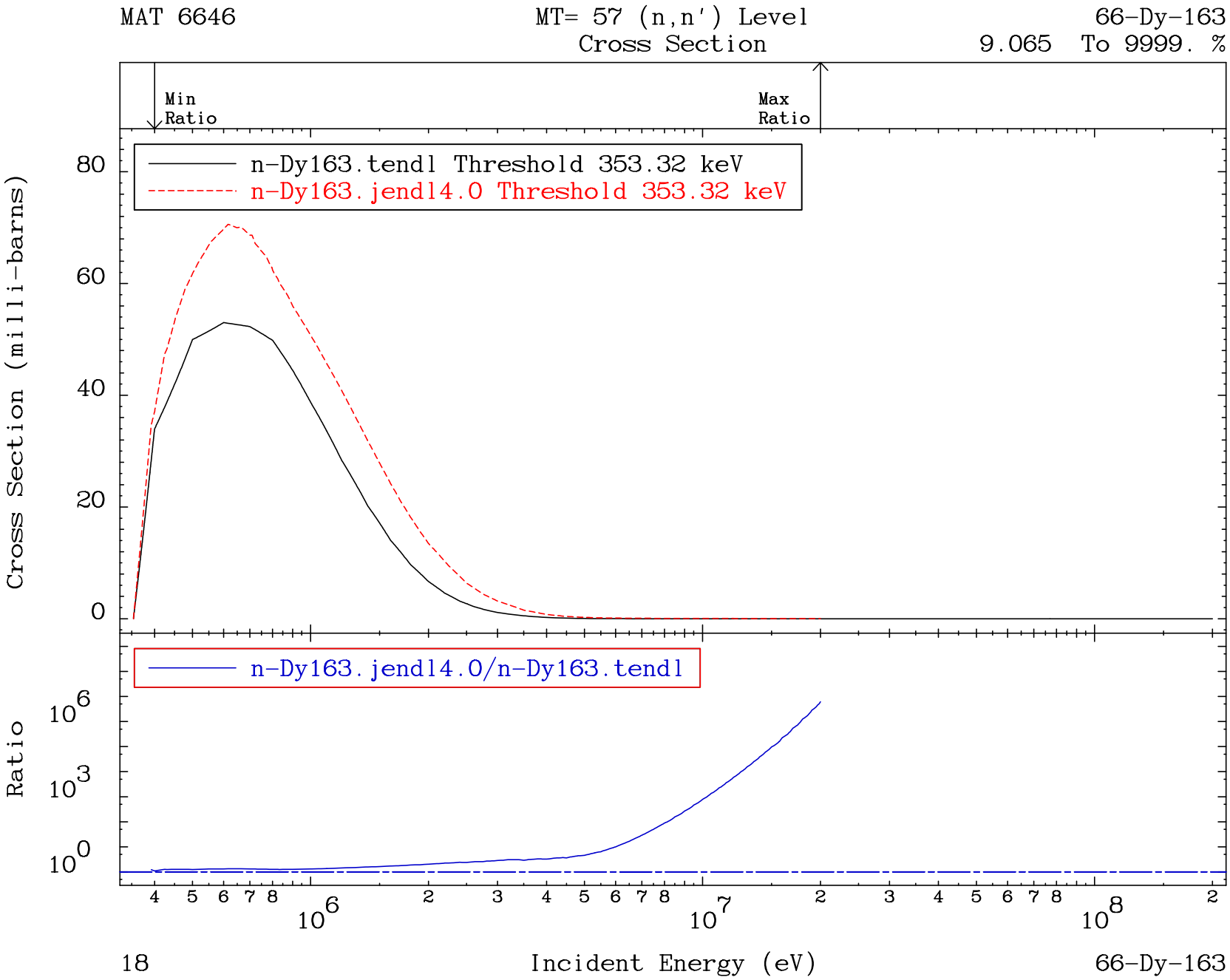

MAT 6646
MT= 52 (n,n') Level
Cross Section
66-Dy-163
-53.80 To 31.02 %
Max Ratio
Min Ratio
n-Dy163.tendl Threshold 168.38 keV
n-Dy163.jendl4.0 Threshold 168.38 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
1.2
0.8
0.4
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
13
Incident Energy (eV)
66-Dy-163

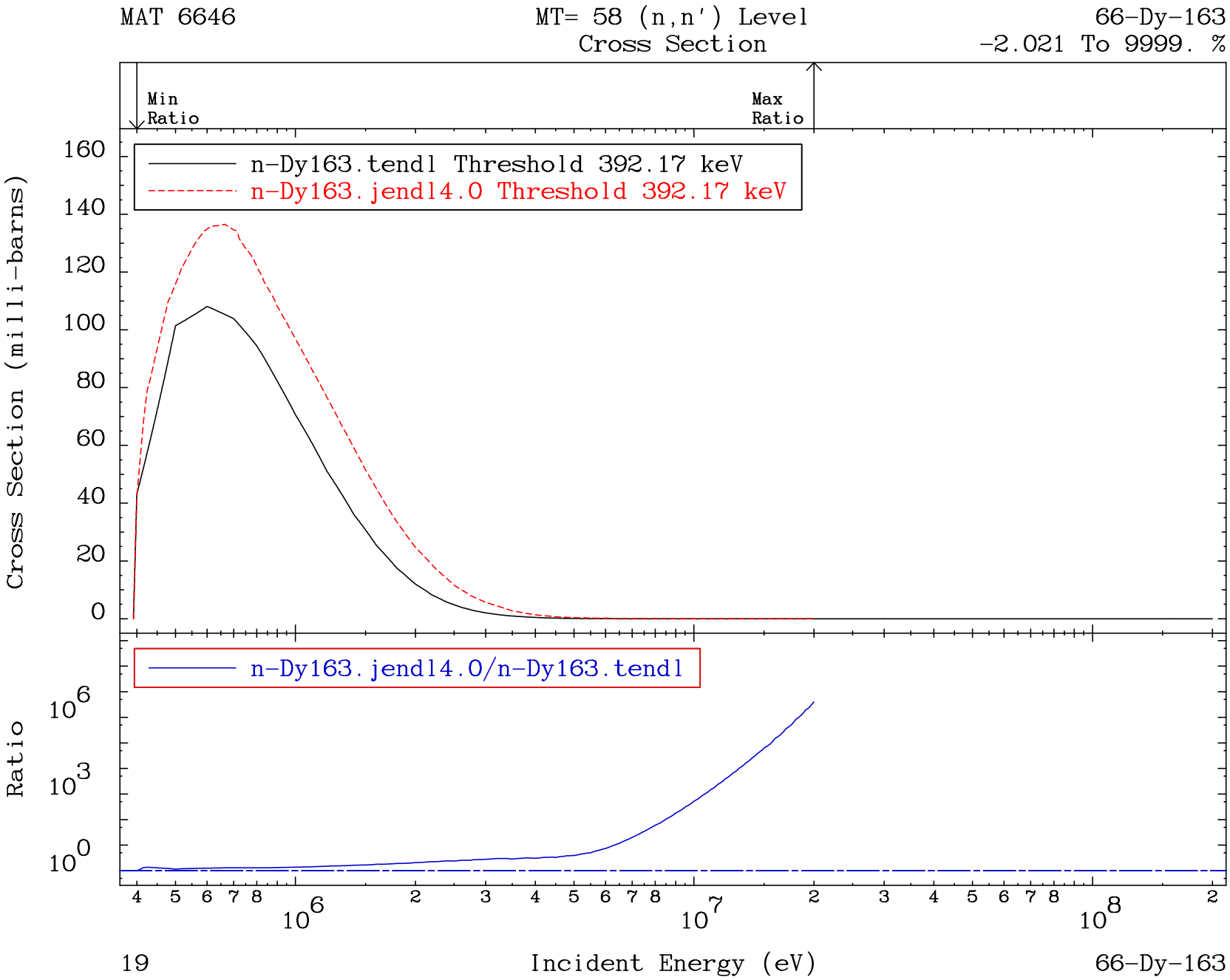

MAT 6646
MT= 53 (n,n') Level
Cross Section
66-Dy-163
6.818 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 252.44 keV
n-Dy163.jendl4.0 Threshold 252.44 keV
Cross Section (milli-barns)
400
300
200
100
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
14
Incident Energy (eV)
66-Dy-163

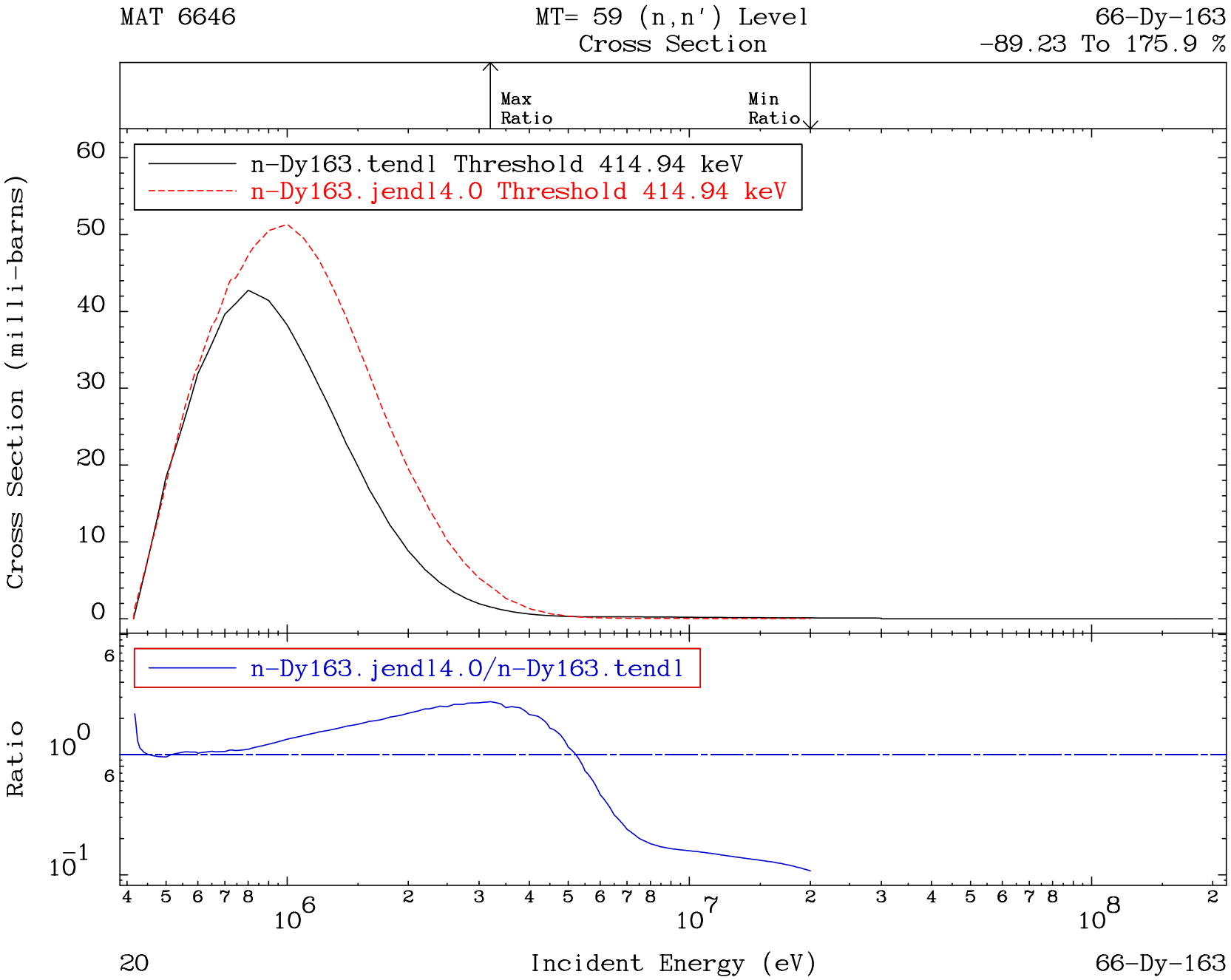

MAT 6646
MT= 54 (n,n') Level
Cross Section
66-Dy-163
1.727 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 283.32 keV
n-Dy163.jendl4.0 Threshold 283.32 keV
Cross Section (milli-barns)
0
20
40
60
80
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^0
10^1
10^2
10^6
10^7
10^8
Incident Energy (eV)
15
66-Dy-163

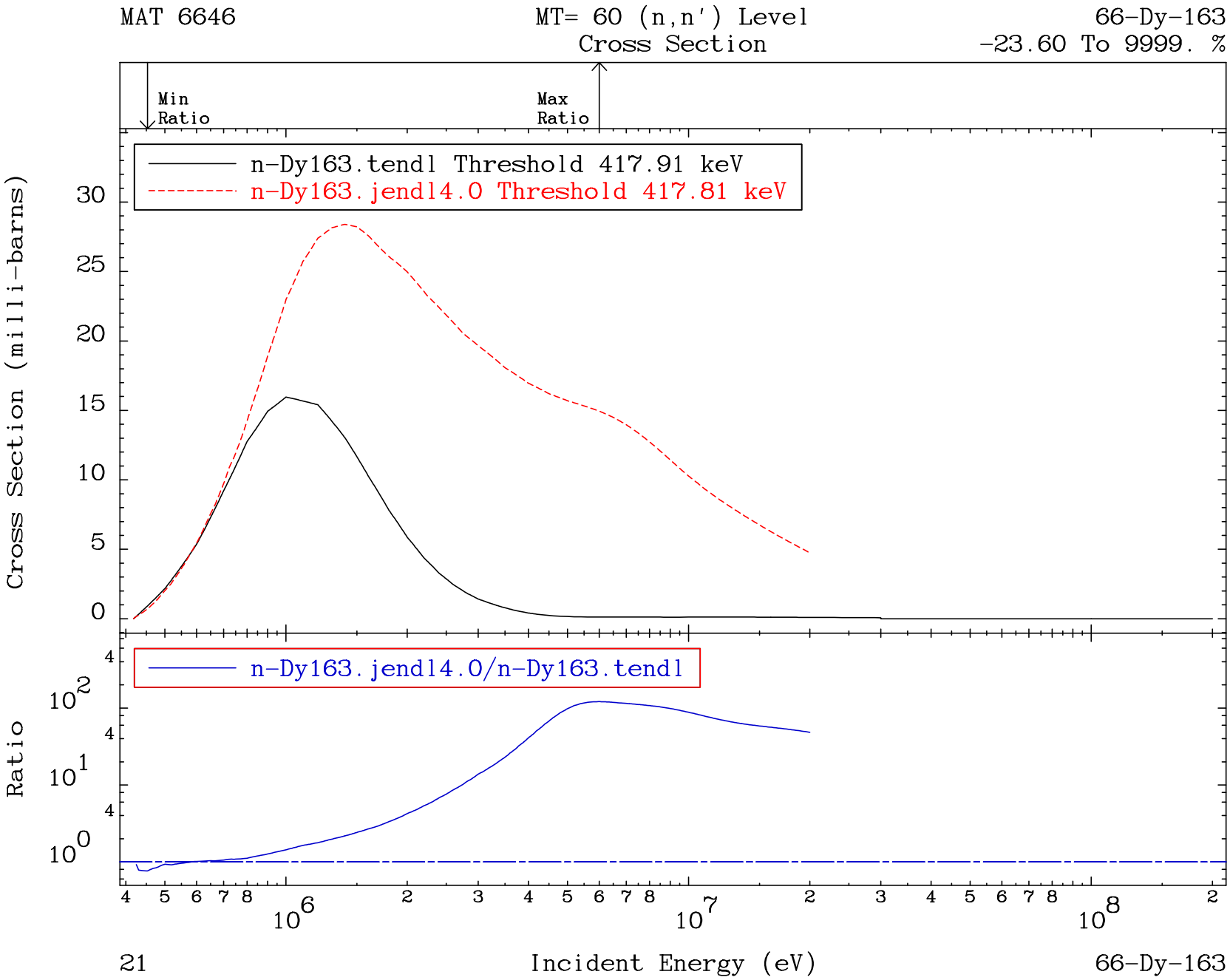

MAT 6646
MT= 55 (n,n') Level
Cross Section
66-Dy-163
12.35 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 287.36 keV
n-Dy163.jendl4.0 Threshold 287.36 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
66-Dy-163

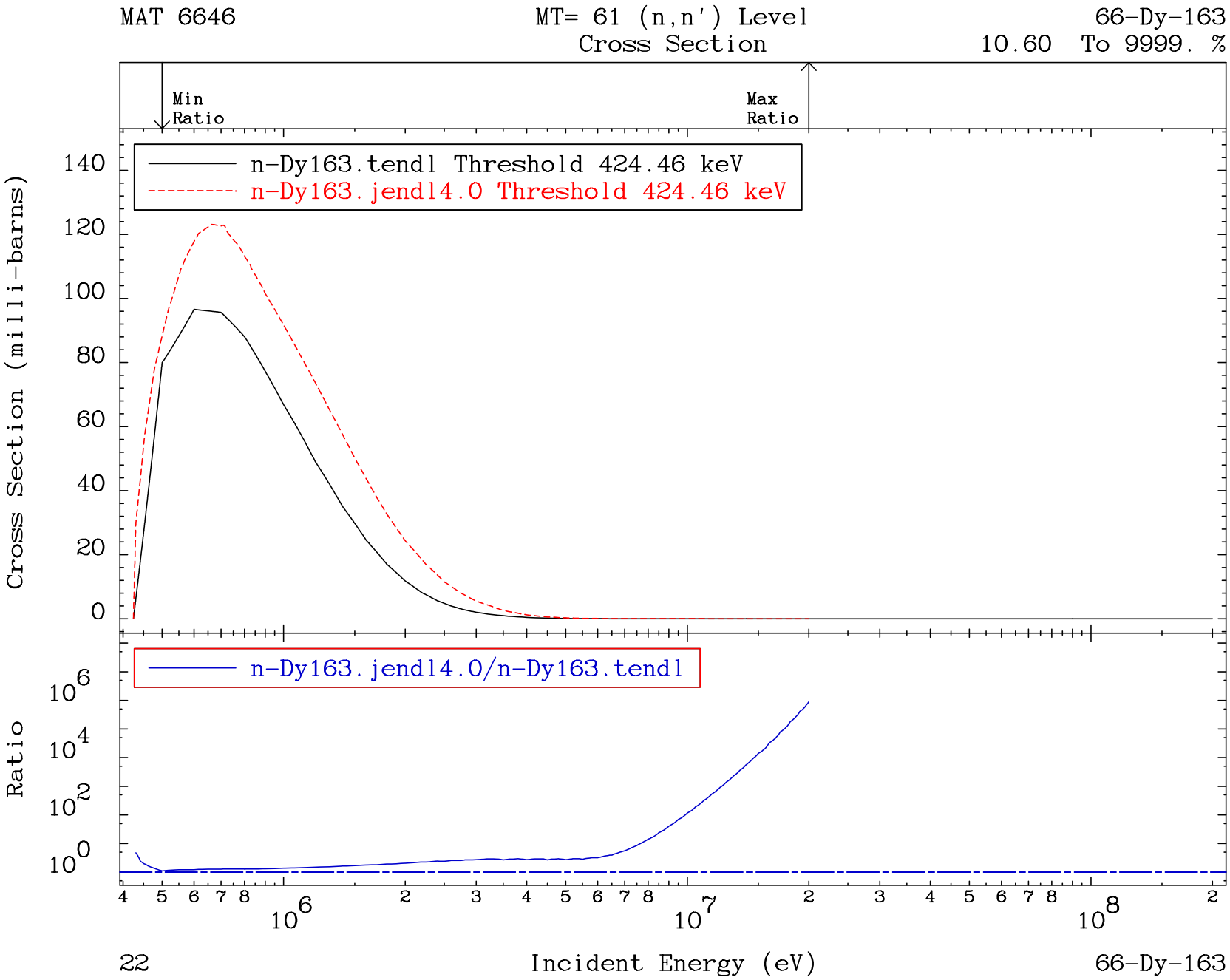

MAT 6646
MT= 56 (n,n') Level
Cross Section
66-Dy-163
12.22 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 338.63 keV
n-Dy163.jendl4.0 Threshold 338.63 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^4
10^2
10^0
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
66-Dy-163

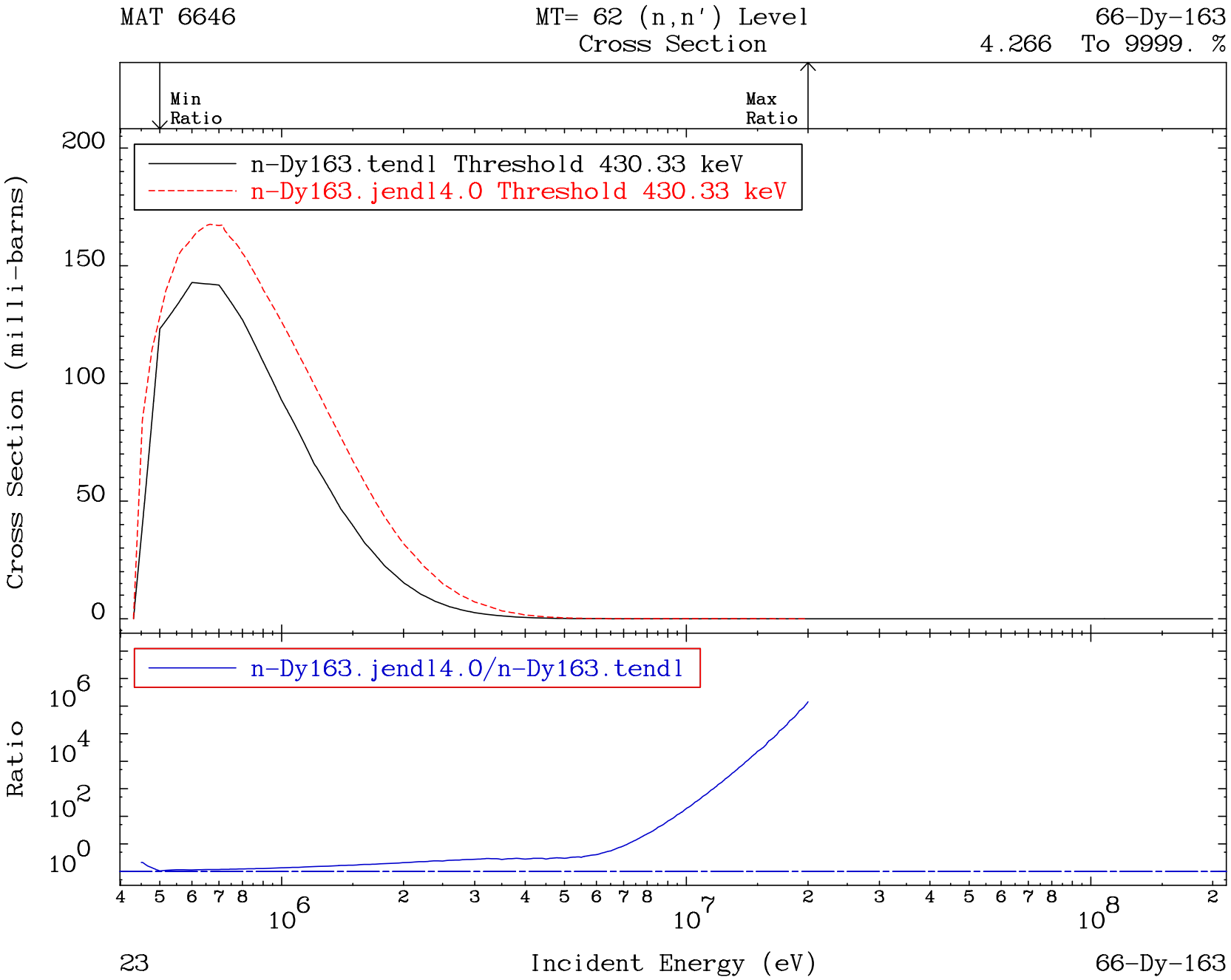

MAT 6646
MT= 57 (n,n') Level
Cross Section
66-Dy-163
9.065 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 353.32 keV
n-Dy163.jendl4.0 Threshold 353.32 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^3
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
66-Dy-163

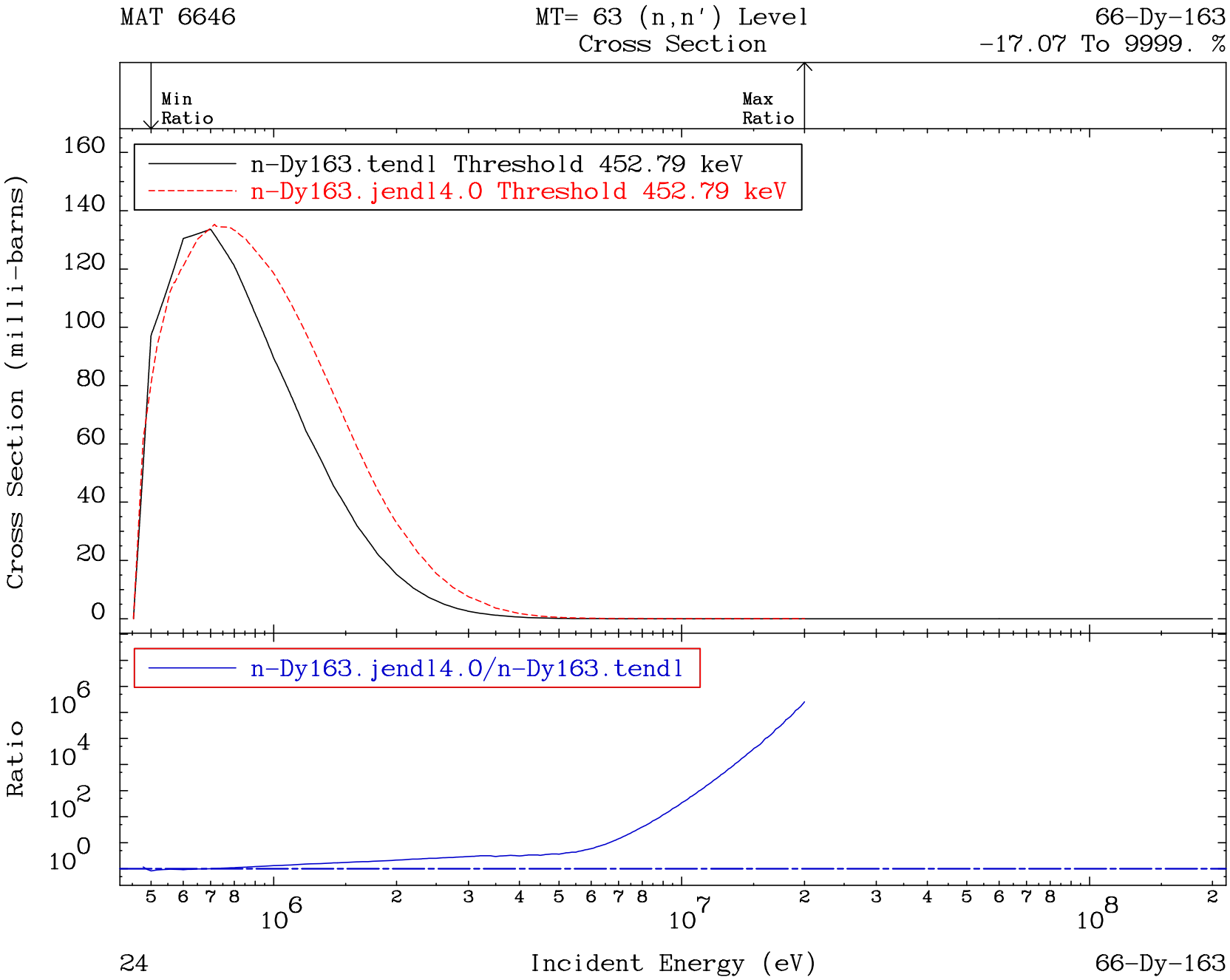

MAT 6646
MT= 58 (n,n') Level
Cross Section
66-Dy-163
-2.021 To 9999. %
Min
Ratio
Max
Ratio
n-Dy163.tendl Threshold 392.17 keV
n-Dy163.jendl4.0 Threshold 392.17 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^3
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
66-Dy-163

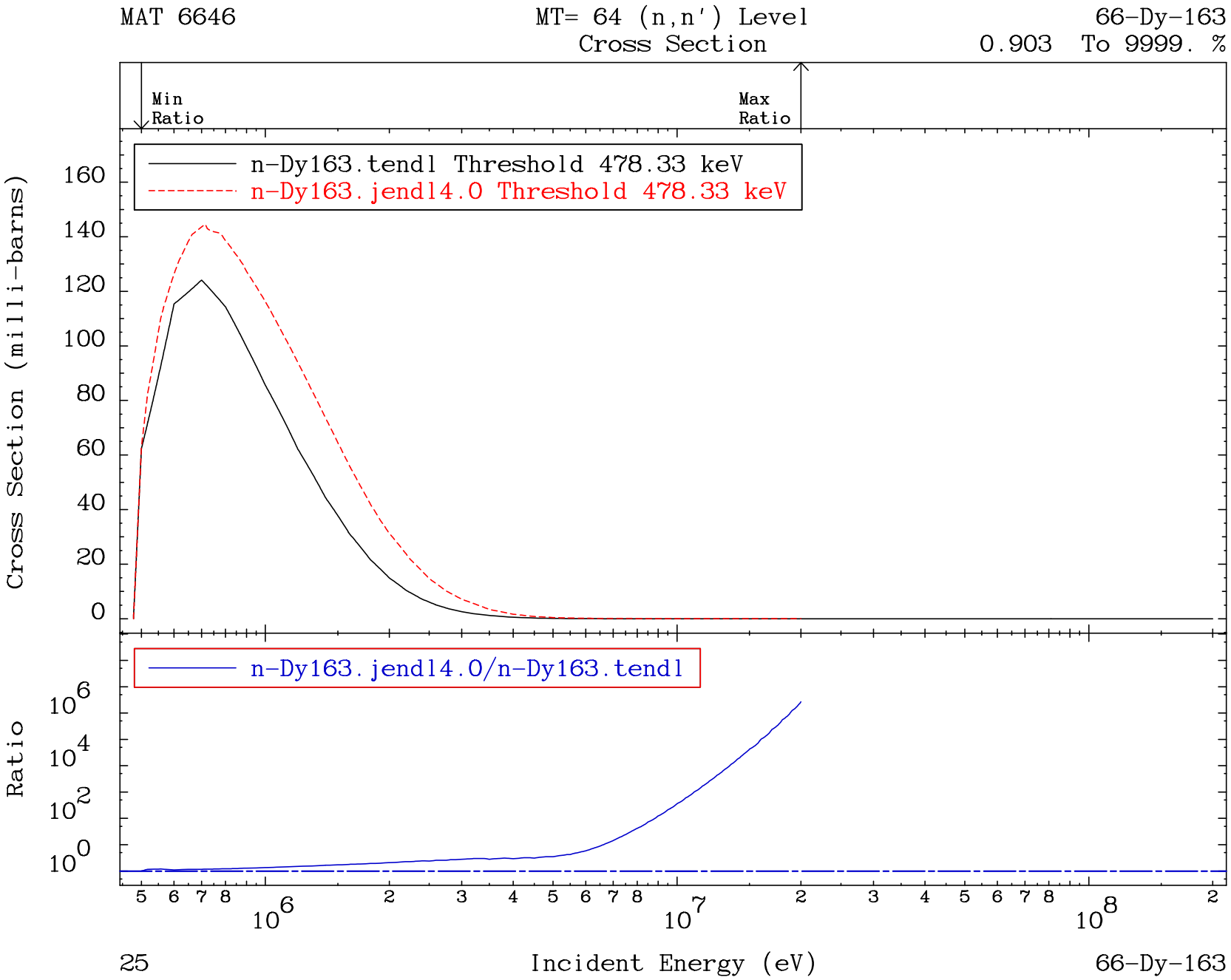

MAT 6646
MT= 59 (n,n') Level
Cross Section
66-Dy-163
-89.23 To 175.9 %
Max
Ratio
Min
Ratio
n-Dy163.tendl Threshold 414.94 keV
n-Dy163.jendl4.0 Threshold 414.94 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
6
10^0
6
10^{-1}
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
66-Dy-163

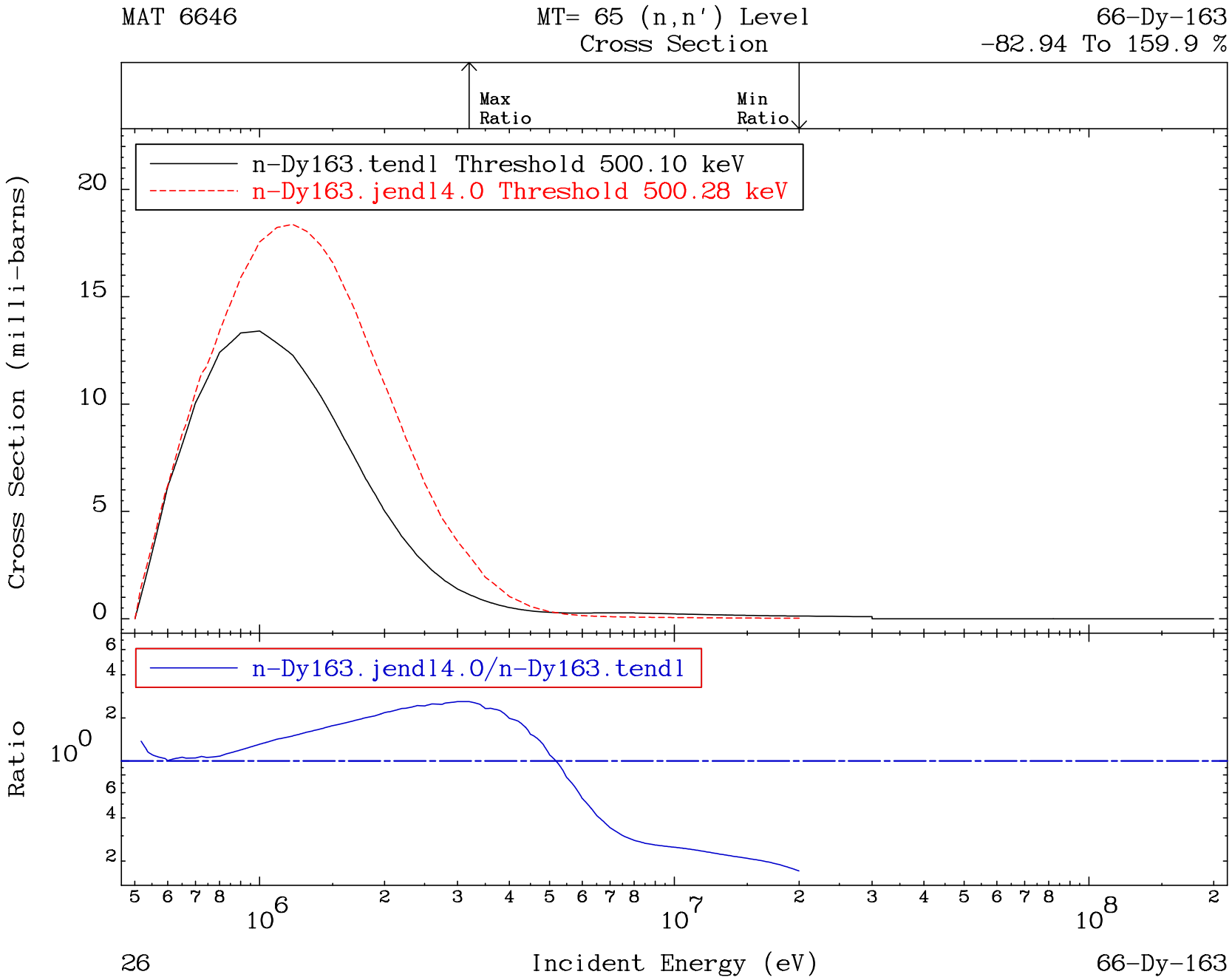

MAT 6646
MT= 60 (n,n') Level
Cross Section
66-Dy-163
-23.60 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 417.91 keV
n-Dy163.jendl4.0 Threshold 417.81 keV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^2
10^1
10^0
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
66-Dy-163

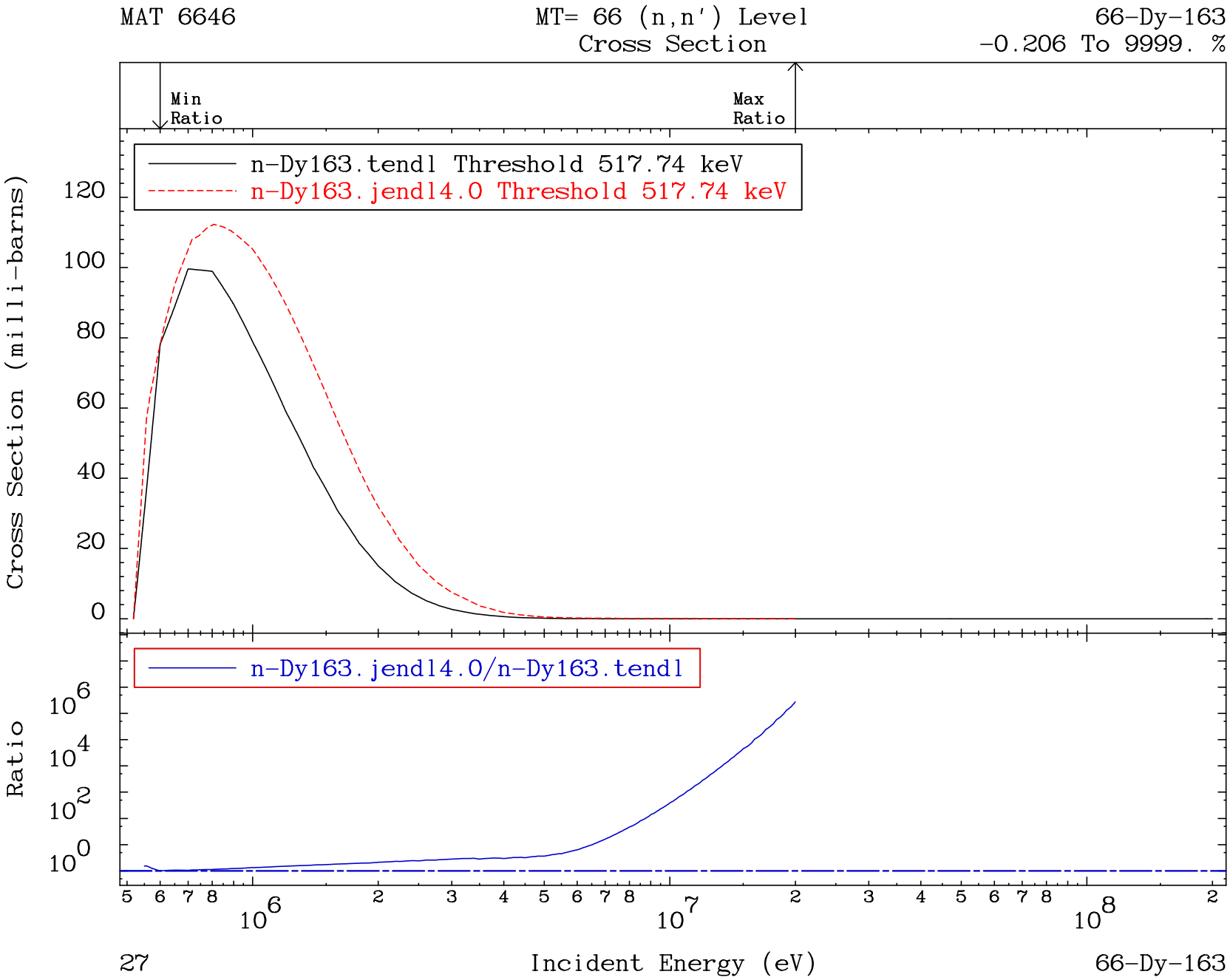

MAT 6646
MT= 61 (n,n') Level
Cross Section
66-Dy-163
10.60 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 424.46 keV
n-Dy163.jendl4.0 Threshold 424.46 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^4
10^2
10^0
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
66-Dy-163

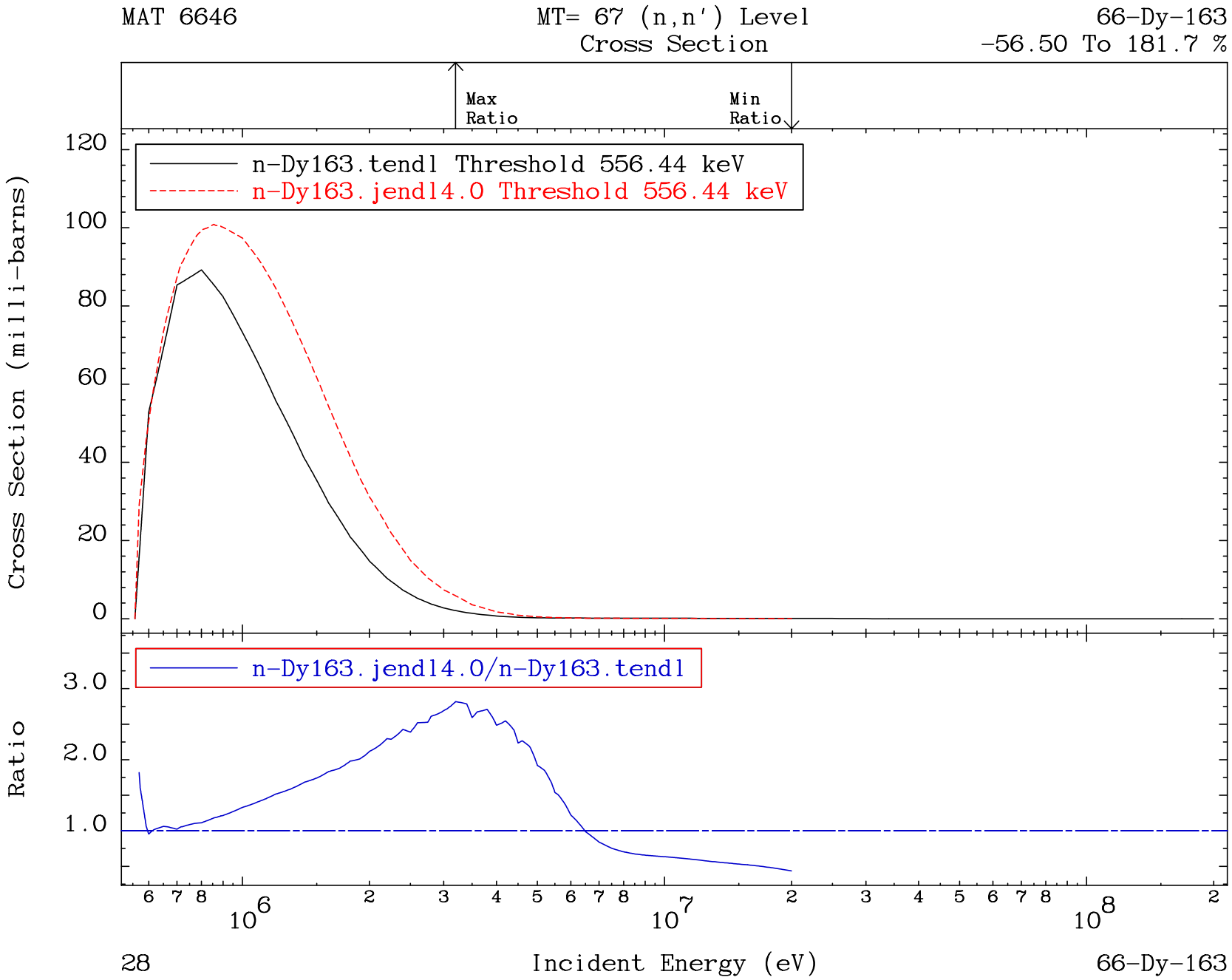

MAT 6646
MT= 62 (n,n') Level
Cross Section
66-Dy-163
4.266 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 430.33 keV
n-Dy163.jendl4.0 Threshold 430.33 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^4
10^2
10^0
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
23
Incident Energy (eV)
66-Dy-163

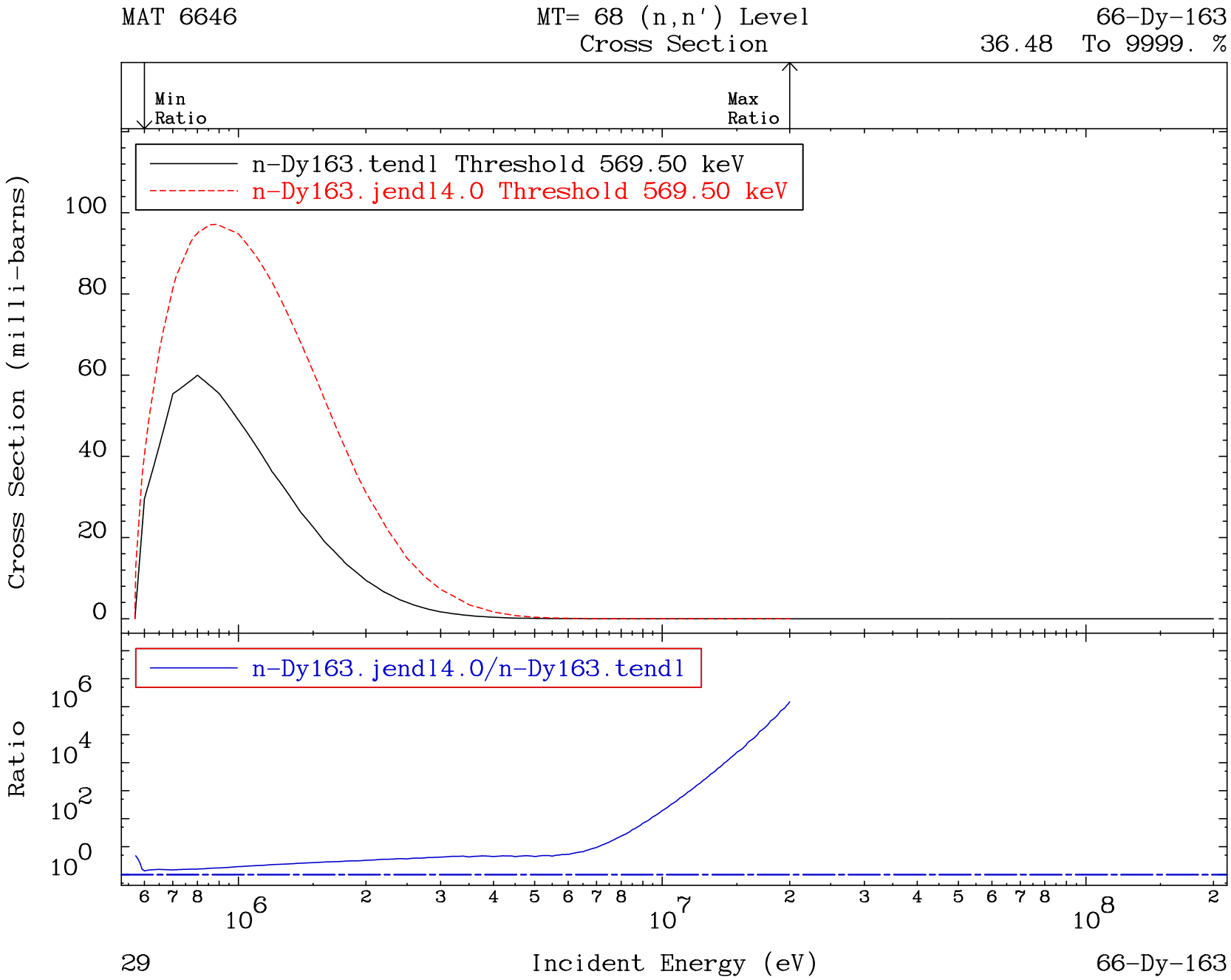

MAT 6646
MT= 63 (n,n') Level
Cross Section
66-Dy-163
-17.07 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 452.79 keV
n-Dy163.jendl4.0 Threshold 452.79 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^4
10^2
10^0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
24
Incident Energy (eV)
66-Dy-163

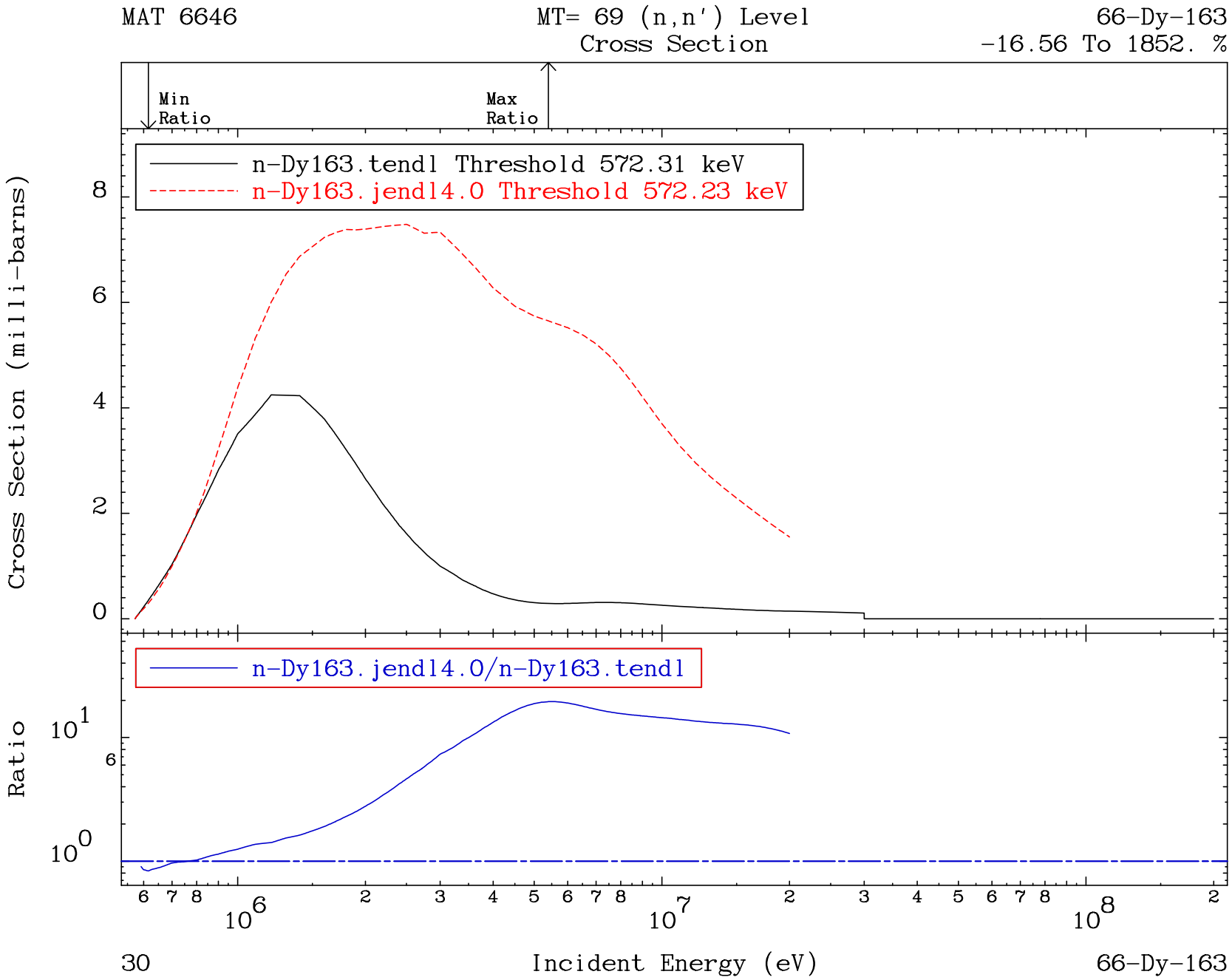

MAT 6646
MT= 64 (n,n') Level
Cross Section
66-Dy-163
0.903 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 478.33 keV
n-Dy163.jendl4.0 Threshold 478.33 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^4
10^2
10^0
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
66-Dy-163

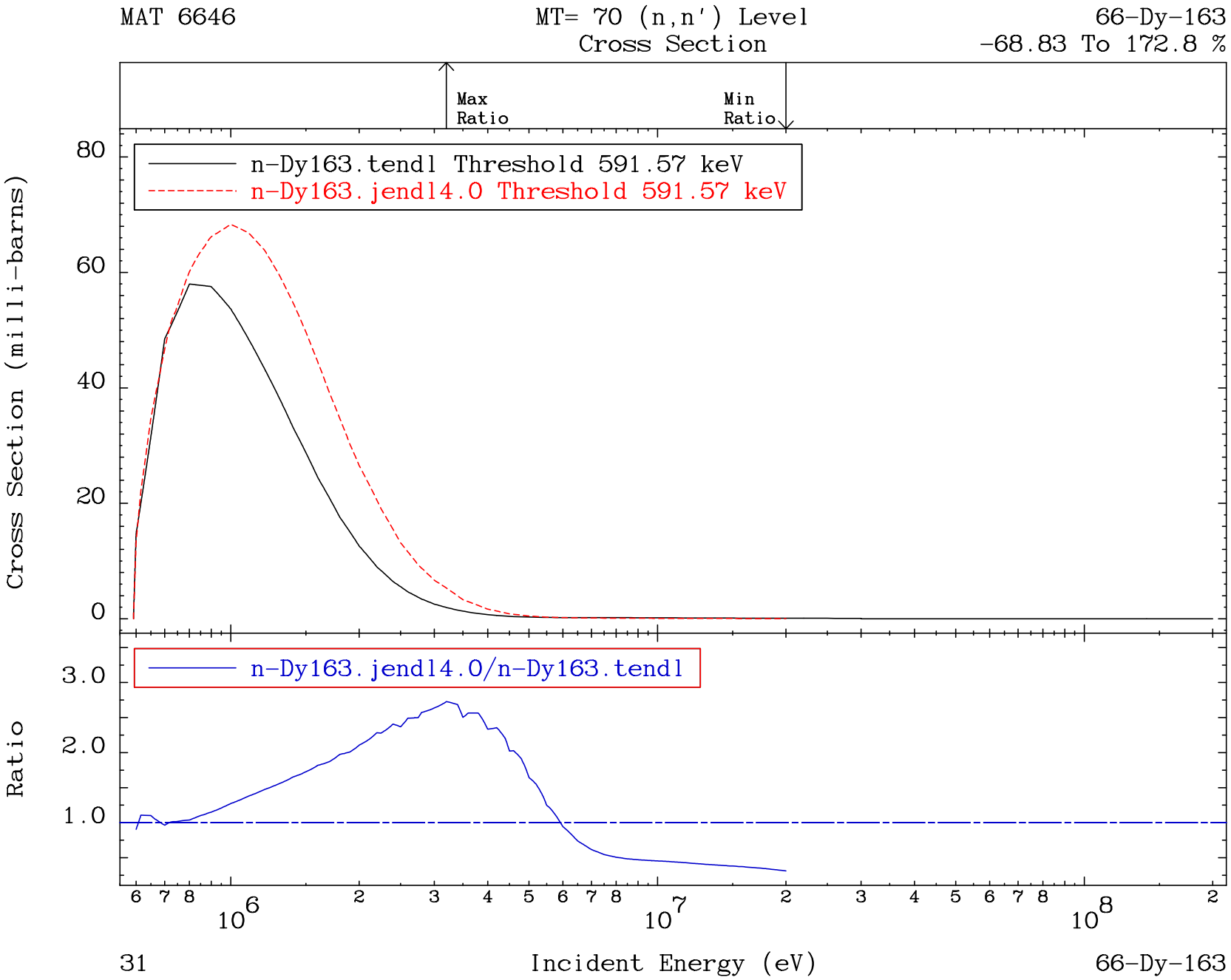

MAT 6646
MT= 65 (n,n') Level
Cross Section
66-Dy-163
-82.94 To 159.9 %
Max
Ratio
Min
Ratio
n-Dy163.tendl Threshold 500.10 keV
n-Dy163.jendl4.0 Threshold 500.28 keV
Cross Section (milli-barns)
20
15
10
5
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
6
4
2
10^0
6
4
2
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
26
Incident Energy (eV)
66-Dy-163

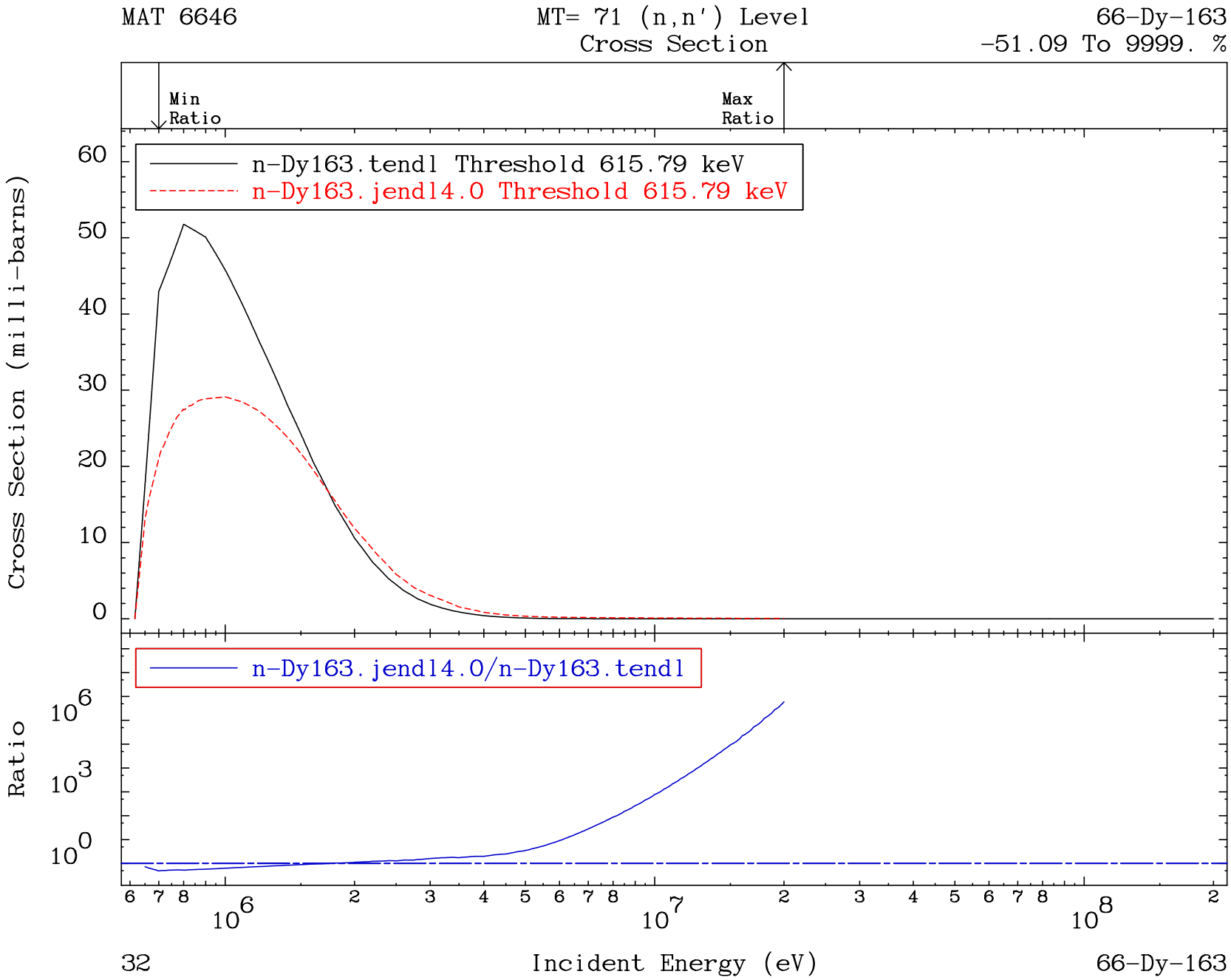

MAT 6646
MT= 66 (n,n') Level
Cross Section
66-Dy-163
-0.206 To 9999. %
Min
Ratio
Max
Ratio
n-Dy163.tendl Threshold 517.74 keV
n-Dy163.jendl4.0 Threshold 517.74 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^4
10^2
10^0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
66-Dy-163

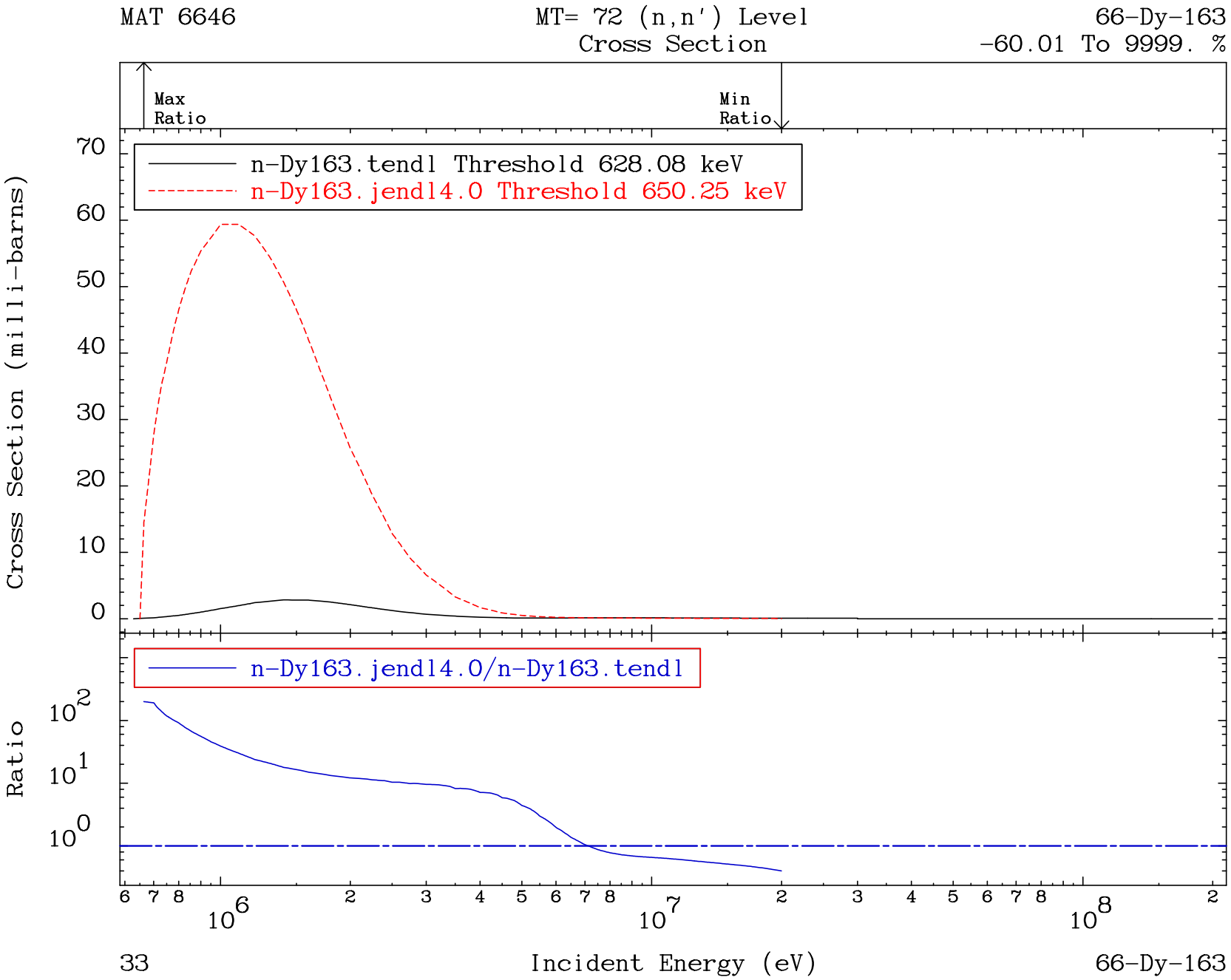

MAT 6646
MT= 67 (n,n') Level
Cross Section
66-Dy-163
-56.50 To 181.7 %
Max
Ratio
Min
Ratio
n-Dy163.tendl Threshold 556.44 keV
n-Dy163.jendl4.0 Threshold 556.44 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
3.0
2.0
1.0
6 7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
28
Incident Energy (eV)
66-Dy-163

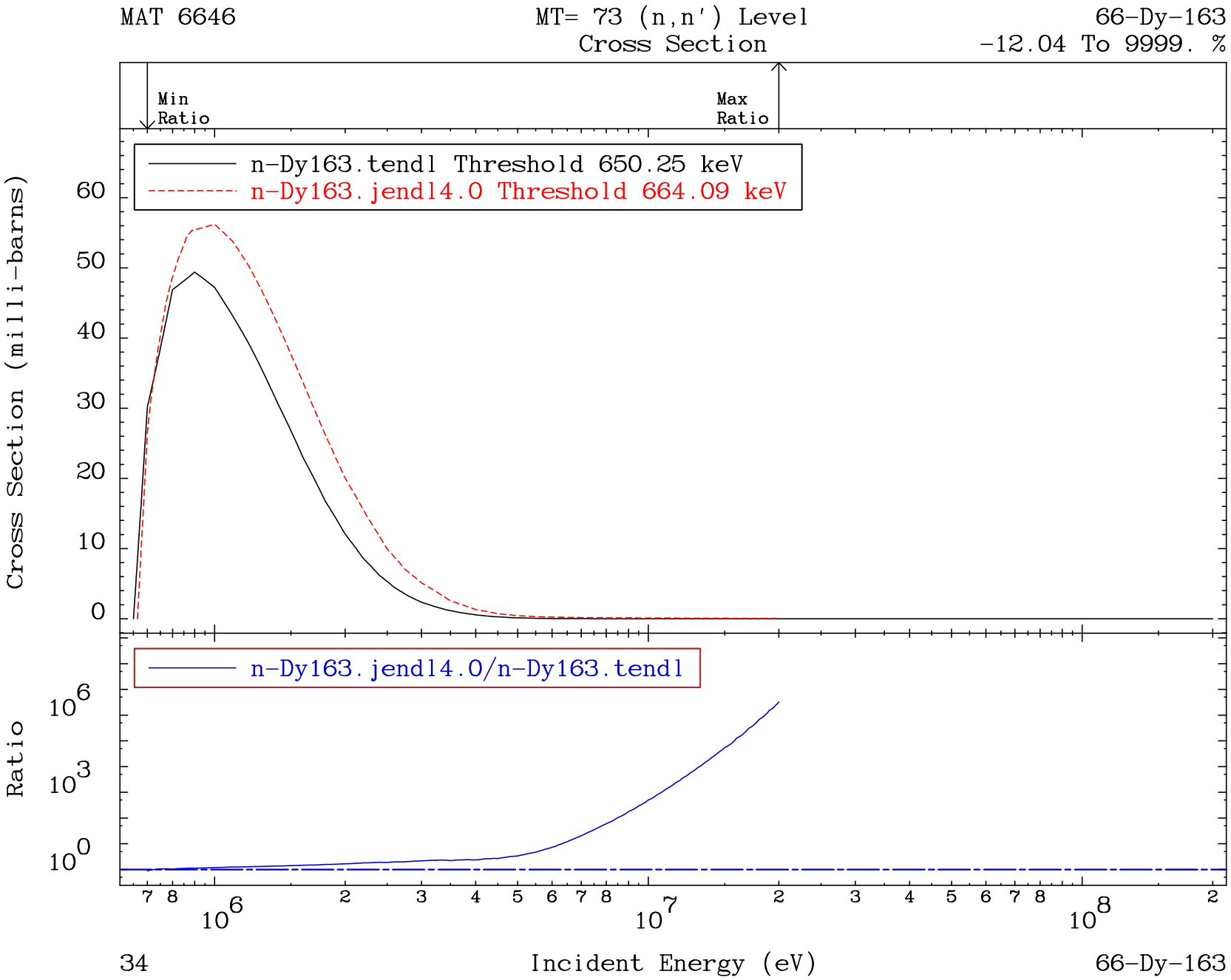

MAT 6646
MT= 68 (n,n') Level
Cross Section
66-Dy-163
36.48 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 569.50 keV
n-Dy163.jendl4.0 Threshold 569.50 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^4
10^2
10^0
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
66-Dy-163

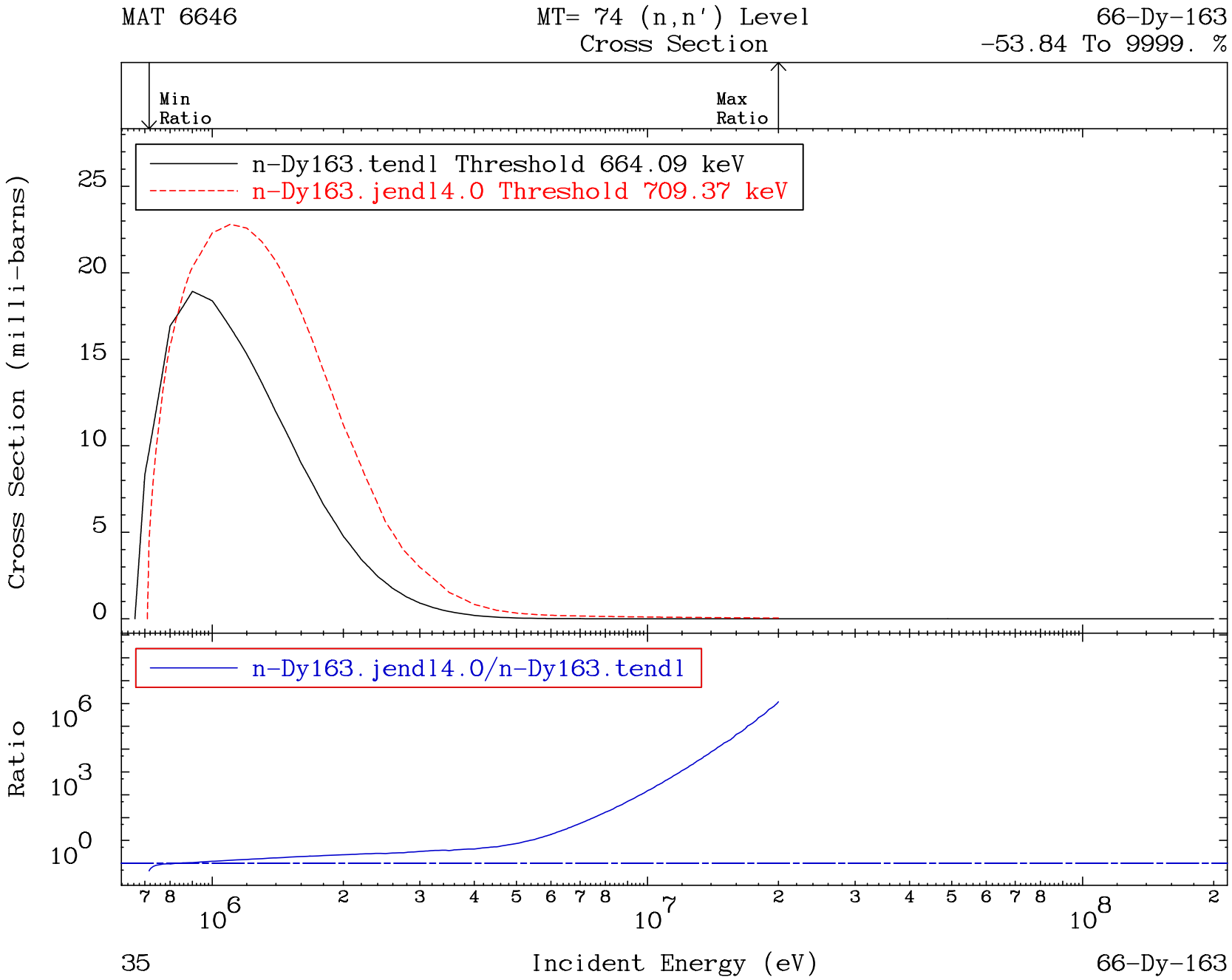

MAT 6646
MT= 69 (n,n') Level
Cross Section
66-Dy-163
-16.56 To 1852. %
Min
Ratio
Max
Ratio
n-Dy163.tendl Threshold 572.31 keV
n-Dy163.jendl4.0 Threshold 572.23 keV
Cross Section (milli-barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
30
66-Dy-163

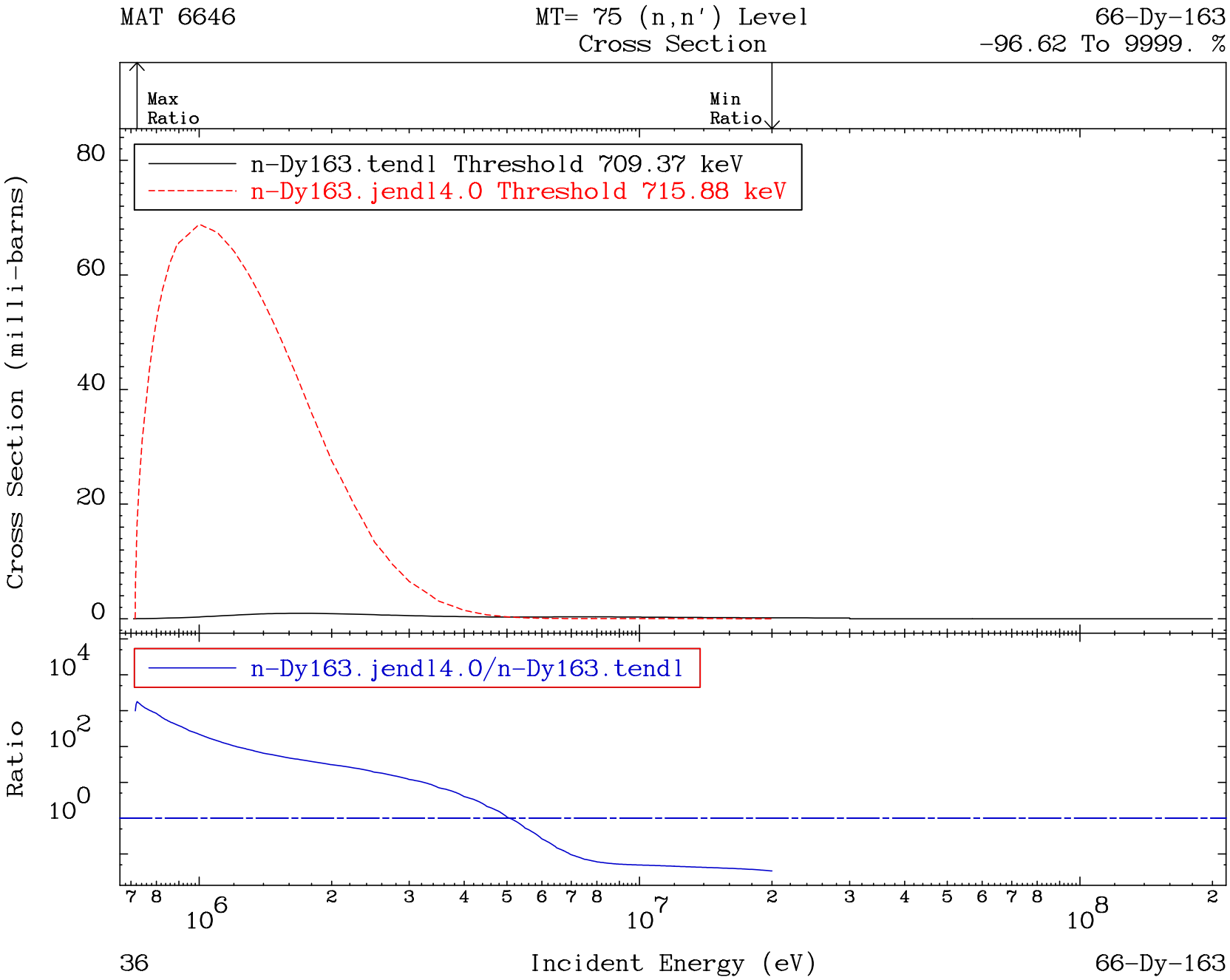

MAT 6646
MT= 70 (n,n') Level
Cross Section
66-Dy-163
-68.83 To 172.8 %
Max
Ratio
Min
Ratio
n-Dy163.tendl Threshold 591.57 keV
n-Dy163.jendl4.0 Threshold 591.57 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
3.0
2.0
1.0
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
31
Incident Energy (eV)
66-Dy-163

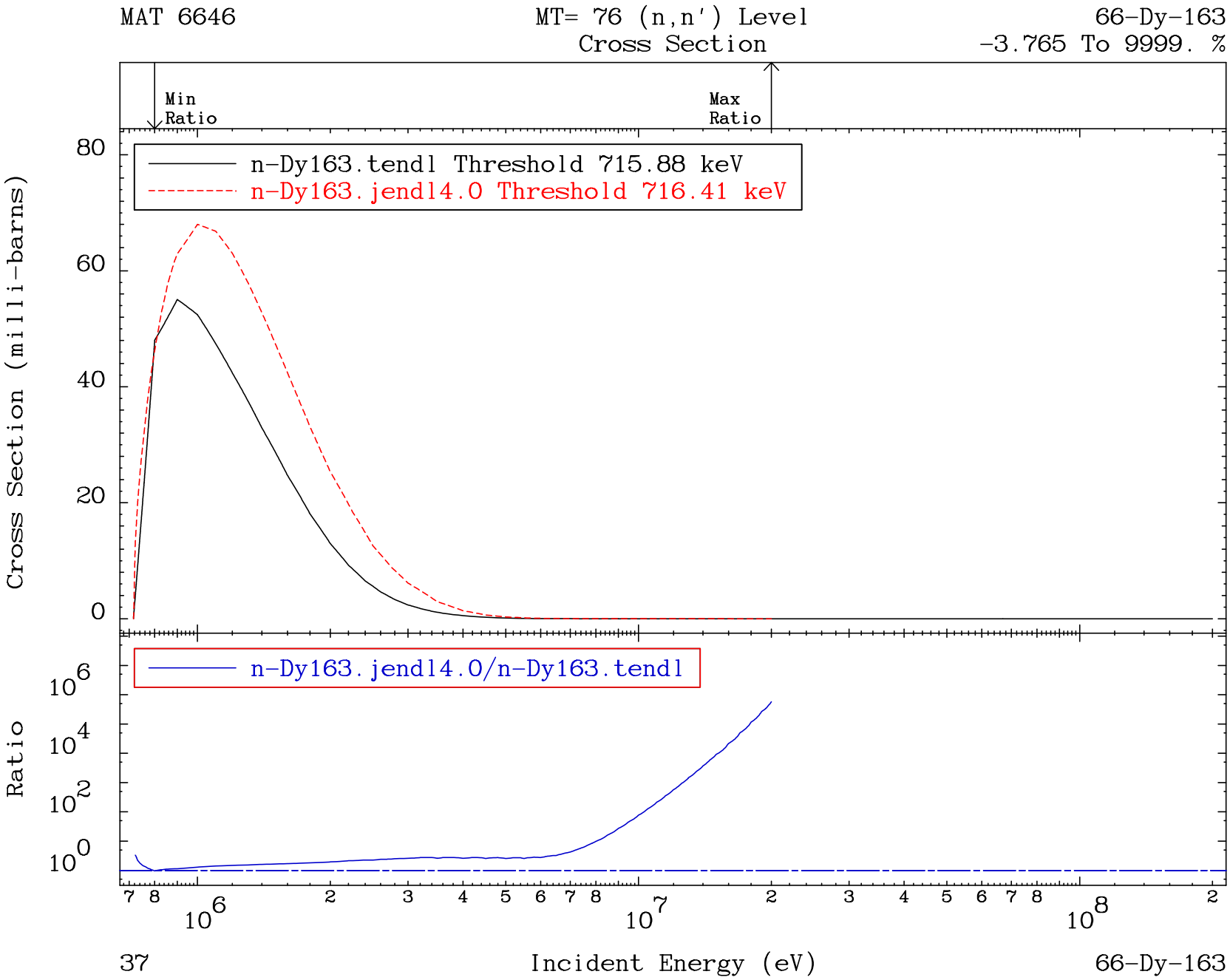

MAT 6646
MT= 71 (n,n') Level
Cross Section
66-Dy-163
-51.09 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 615.79 keV
n-Dy163.jendl4.0 Threshold 615.79 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^3
10^0
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
32
Incident Energy (eV)
66-Dy-163

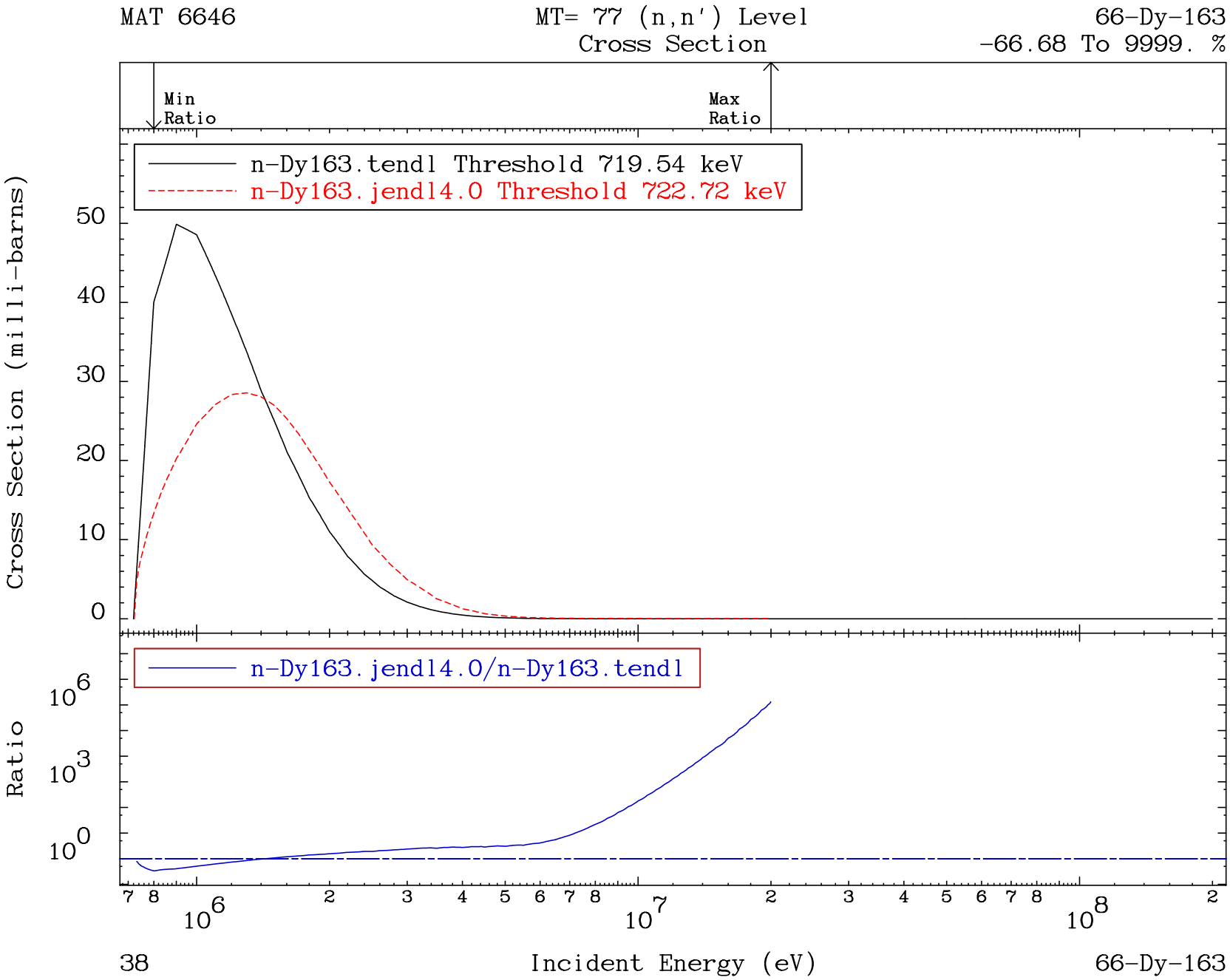

MAT 6646
MT= 72 (n,n') Level
Cross Section
66-Dy-163
-60.01 To 9999. %
Max Ratio
Min Ratio
n-Dy163.tendl Threshold 628.08 keV
n-Dy163.jendl4.0 Threshold 650.25 keV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^2
10^1
10^0
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
33
Incident Energy (eV)
66-Dy-163

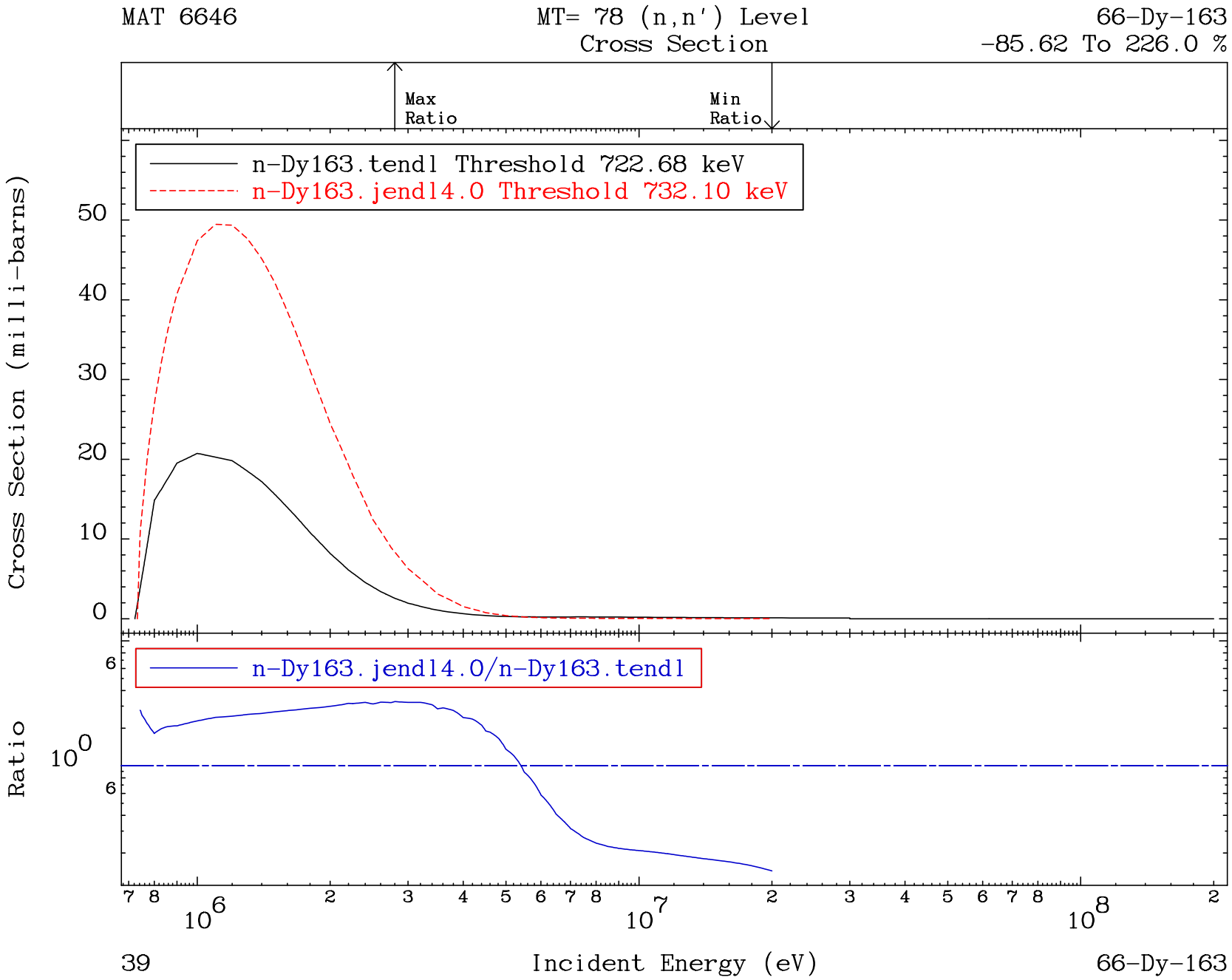

MAT 6646
MT= 73 (n,n') Level
Cross Section
66-Dy-163
-12.04 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 650.25 keV
n-Dy163.jendl4.0 Threshold 664.09 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^3
10^0
7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
34
Incident Energy (eV)
66-Dy-163

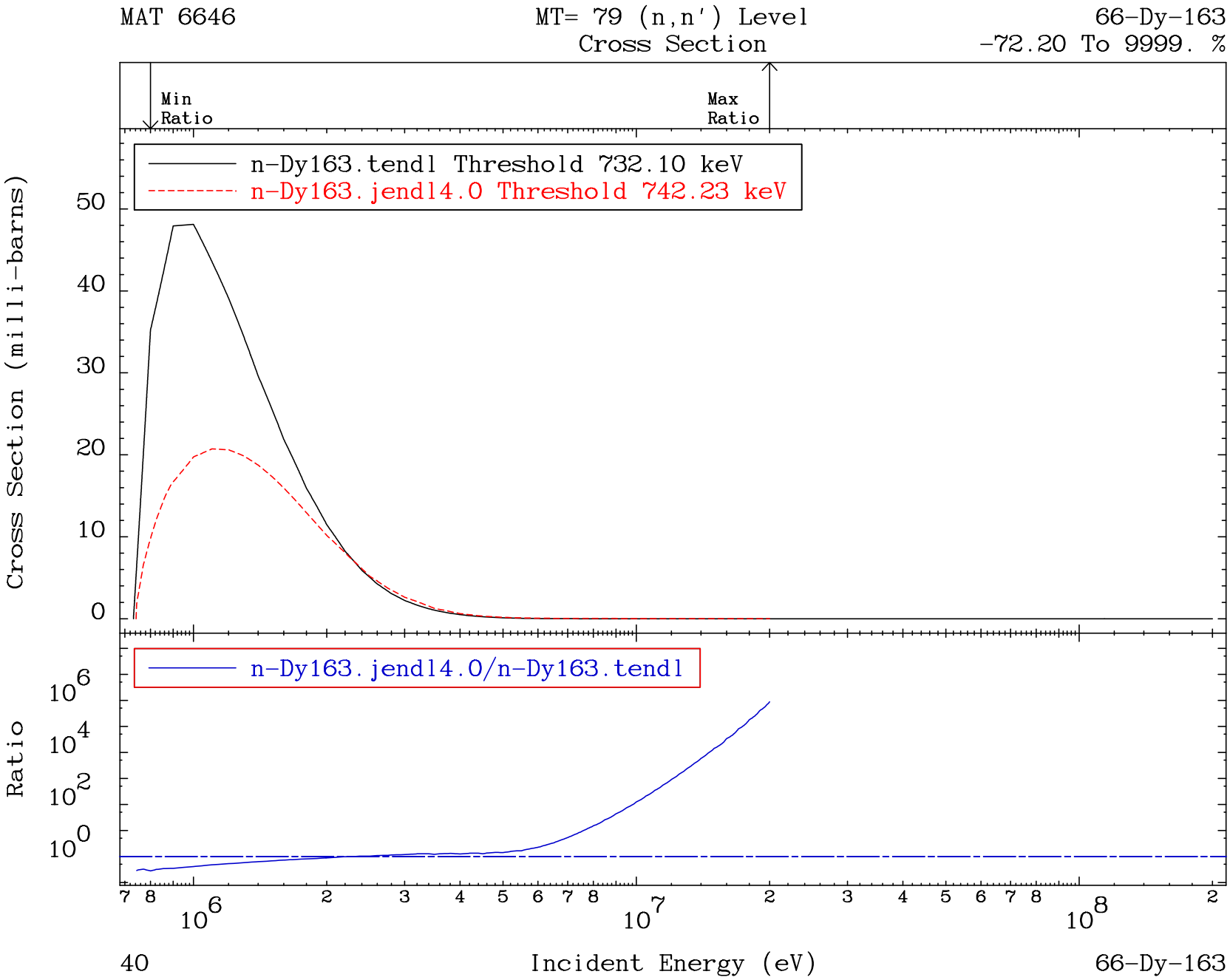

MAT 6646
MT= 74 (n,n') Level
Cross Section
66-Dy-163
-53.84 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 664.09 keV
n-Dy163.jendl4.0 Threshold 709.37 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^3
10^0
7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
66-Dy-163

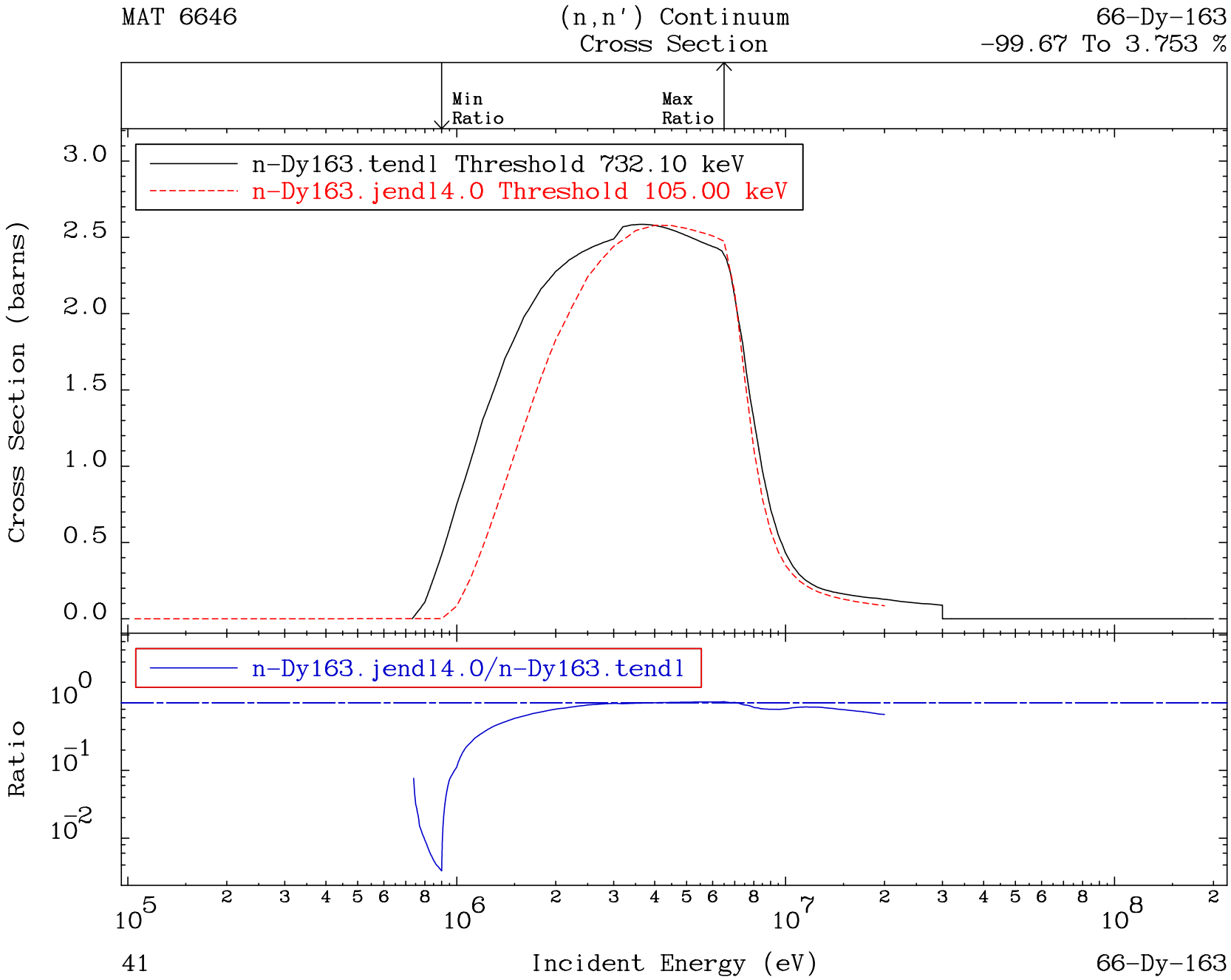

MAT 6646
MT= 75 (n,n') Level
Cross Section
66-Dy-163
-96.62 To 9999. %
Max Ratio
Min Ratio
n-Dy163.tendl Threshold 709.37 keV
n-Dy163.jendl4.0 Threshold 715.88 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^4
10^2
10^0
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
36
Incident Energy (eV)
66-Dy-163

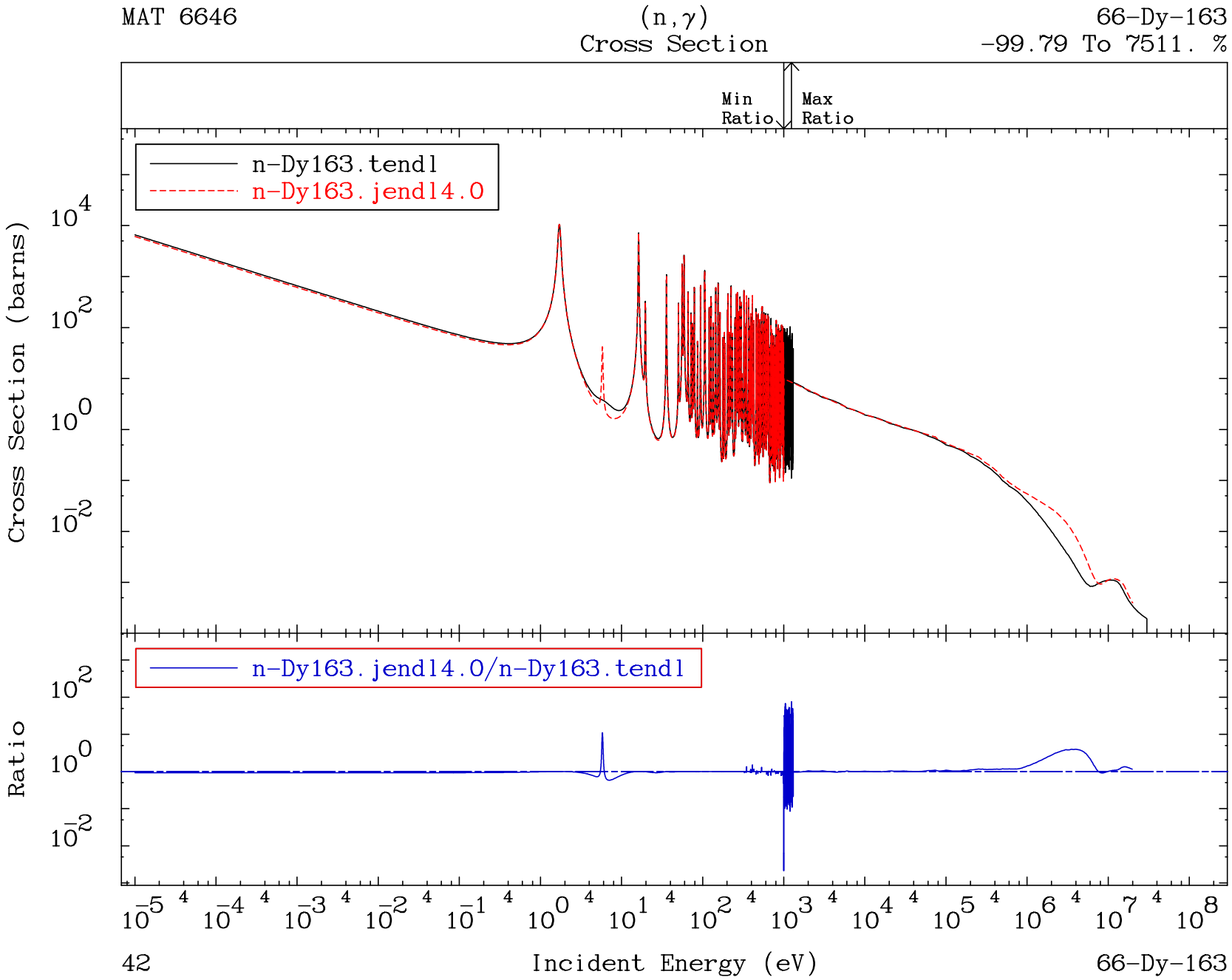

MAT 6646
MT= 76 (n,n') Level
Cross Section
66-Dy-163
-3.765 To 9999. %
Min
Ratio
Max
Ratio
n-Dy163.tendl Threshold 715.88 keV
n-Dy163.jendl4.0 Threshold 716.41 keV
Cross Section (milli-barns)
80
60
40
20
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^4
10^2
10^0
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
37
Incident Energy (eV)
66-Dy-163

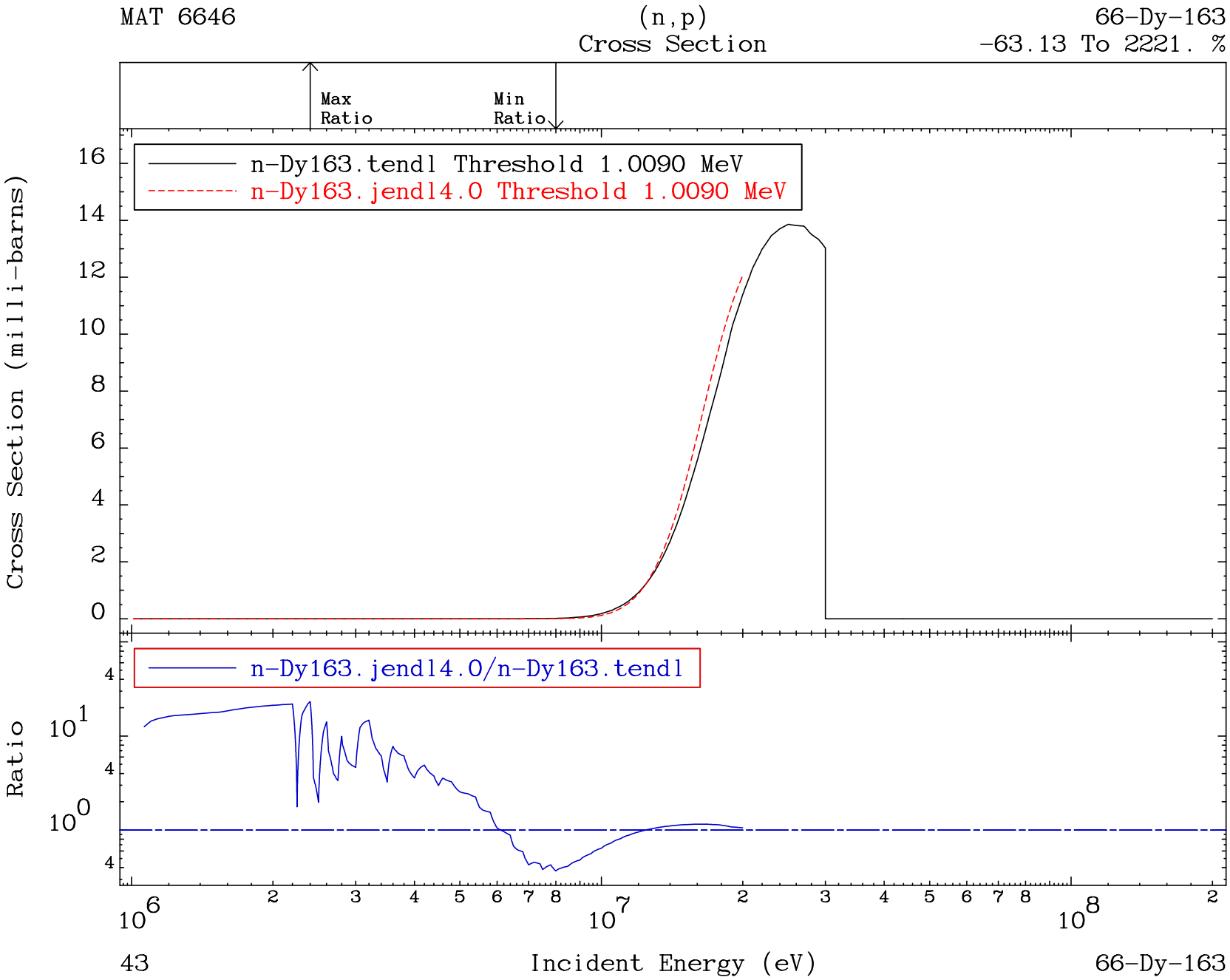

MAT 6646
MT= 77 (n,n') Level
Cross Section
66-Dy-163
-66.68 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 719.54 keV
n-Dy163.jendl4.0 Threshold 722.72 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^3
10^0
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
38
Incident Energy (eV)
66-Dy-163

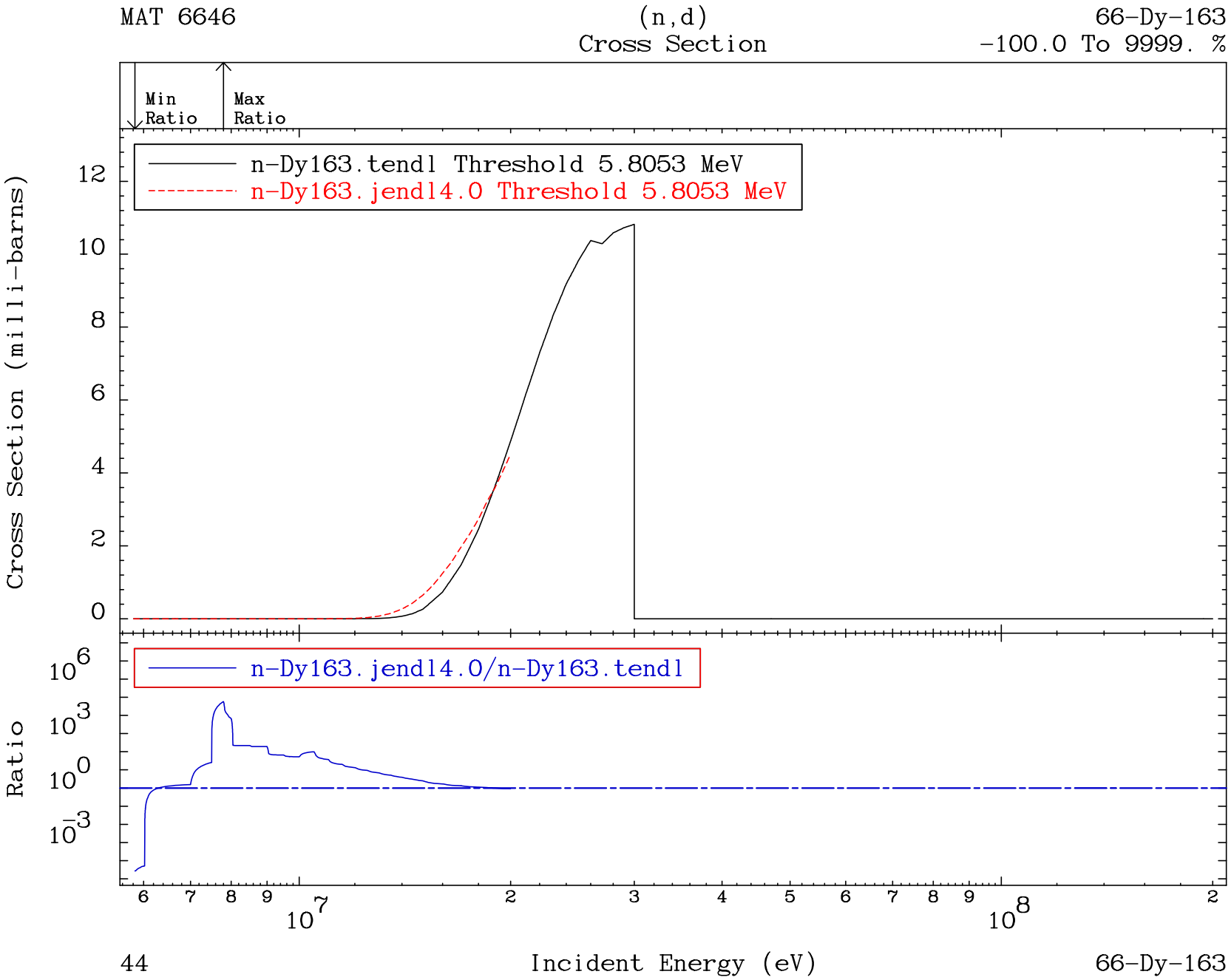

MAT 6646
MT= 78 (n,n') Level
Cross Section
66-Dy-163
-85.62 To 226.0 %
Max
Ratio
Min
Ratio
n-Dy163.tendl Threshold 722.68 keV
n-Dy163.jendl4.0 Threshold 732.10 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
6
10^0
6
7 8
10^6
2
3
4
5
6
7 8
10^7
2
3
4
5
6
7 8
10^8
2
39
Incident Energy (eV)
66-Dy-163

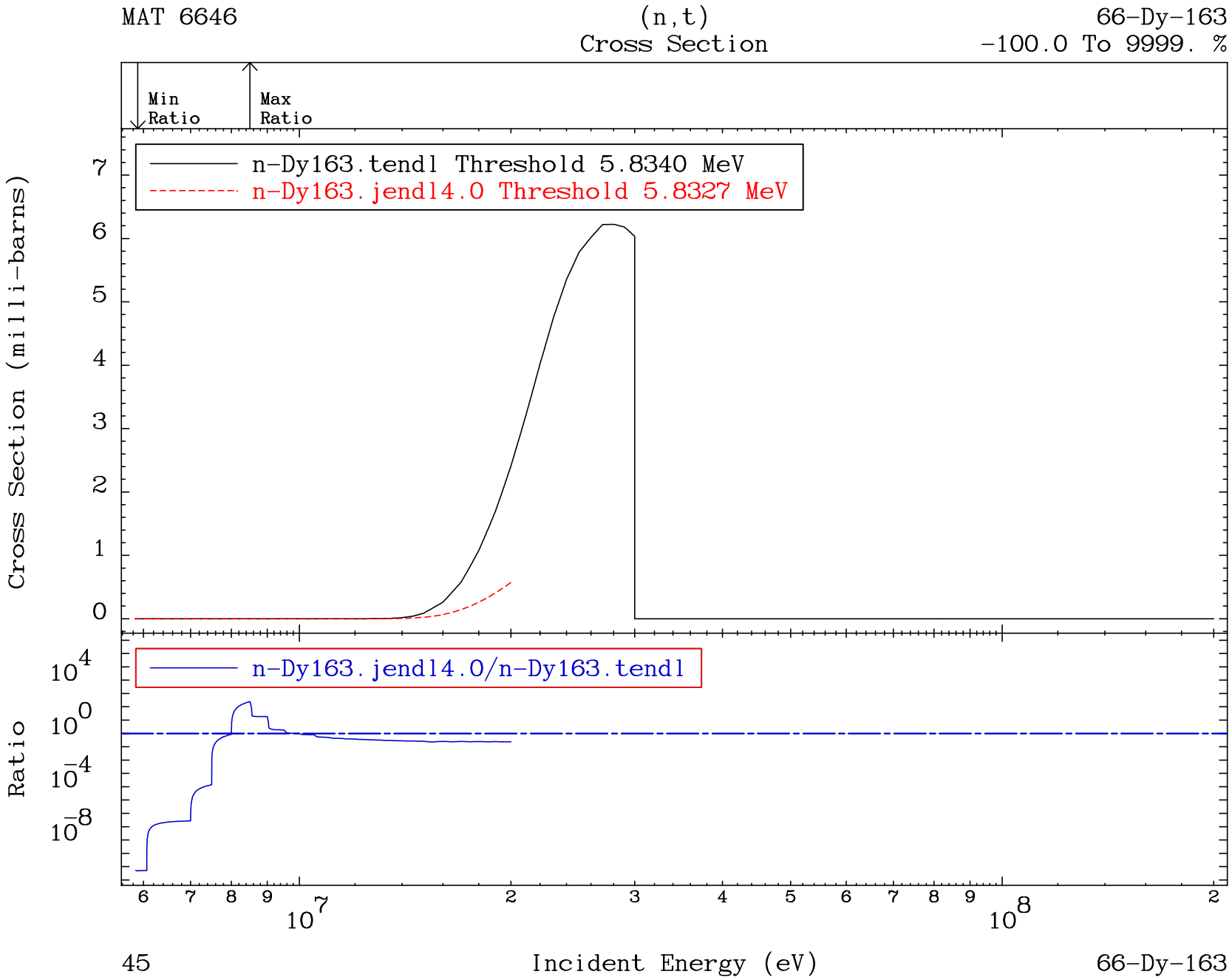

MAT 6646
MT= 79 (n,n') Level
Cross Section
66-Dy-163
-72.20 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 732.10 keV
n-Dy163.jendl4.0 Threshold 742.23 keV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^4
10^2
10^0
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
40
Incident Energy (eV)
66-Dy-163

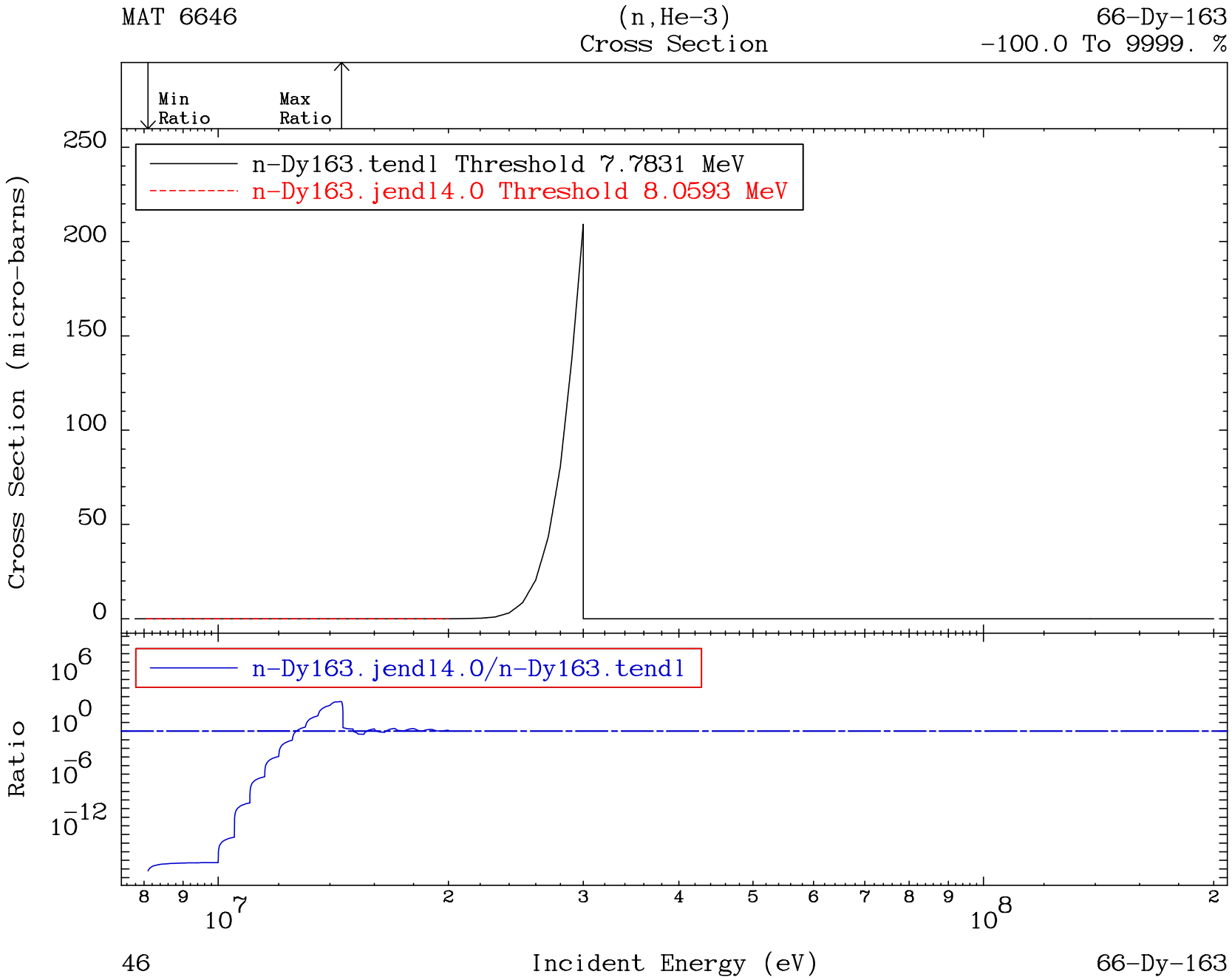

MAT 6646
(n,n') Continuum
Cross Section
66-Dy-163
-99.67 To 3.753 %
Min
Ratio
Max
Ratio
n-Dy163.tendl Threshold 732.10 keV
n-Dy163.jendl4.0 Threshold 105.00 keV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^0
10^-1
10^-2
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
41
Incident Energy (eV)
66-Dy-163

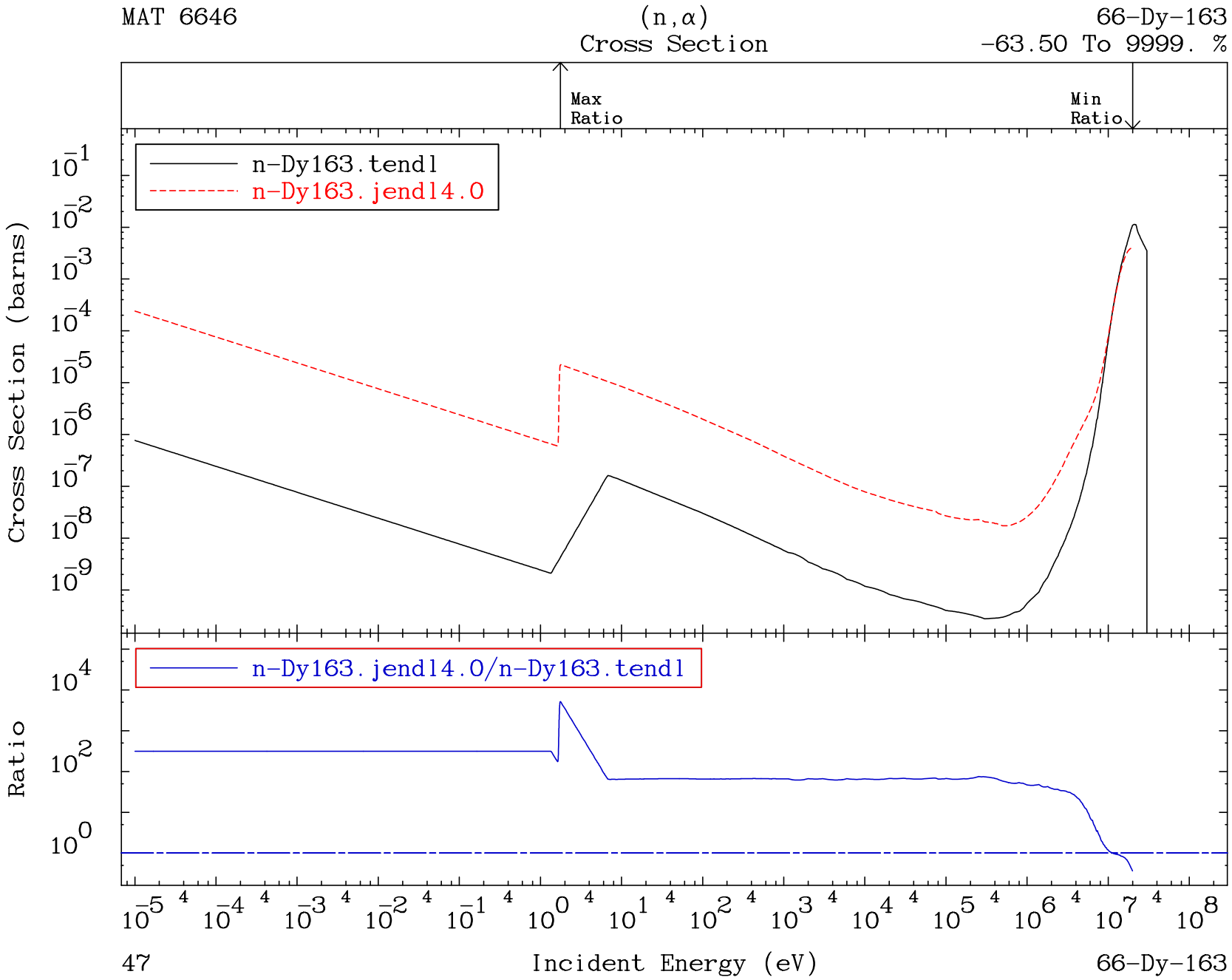

MAT 6646
(n,γ)
Cross Section
66-Dy-163
-99.79 To 7511. %
Min Ratio
Max Ratio
n-Dy163.tendl
n-Dy163.jendl4.0
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
42
66-Dy-163

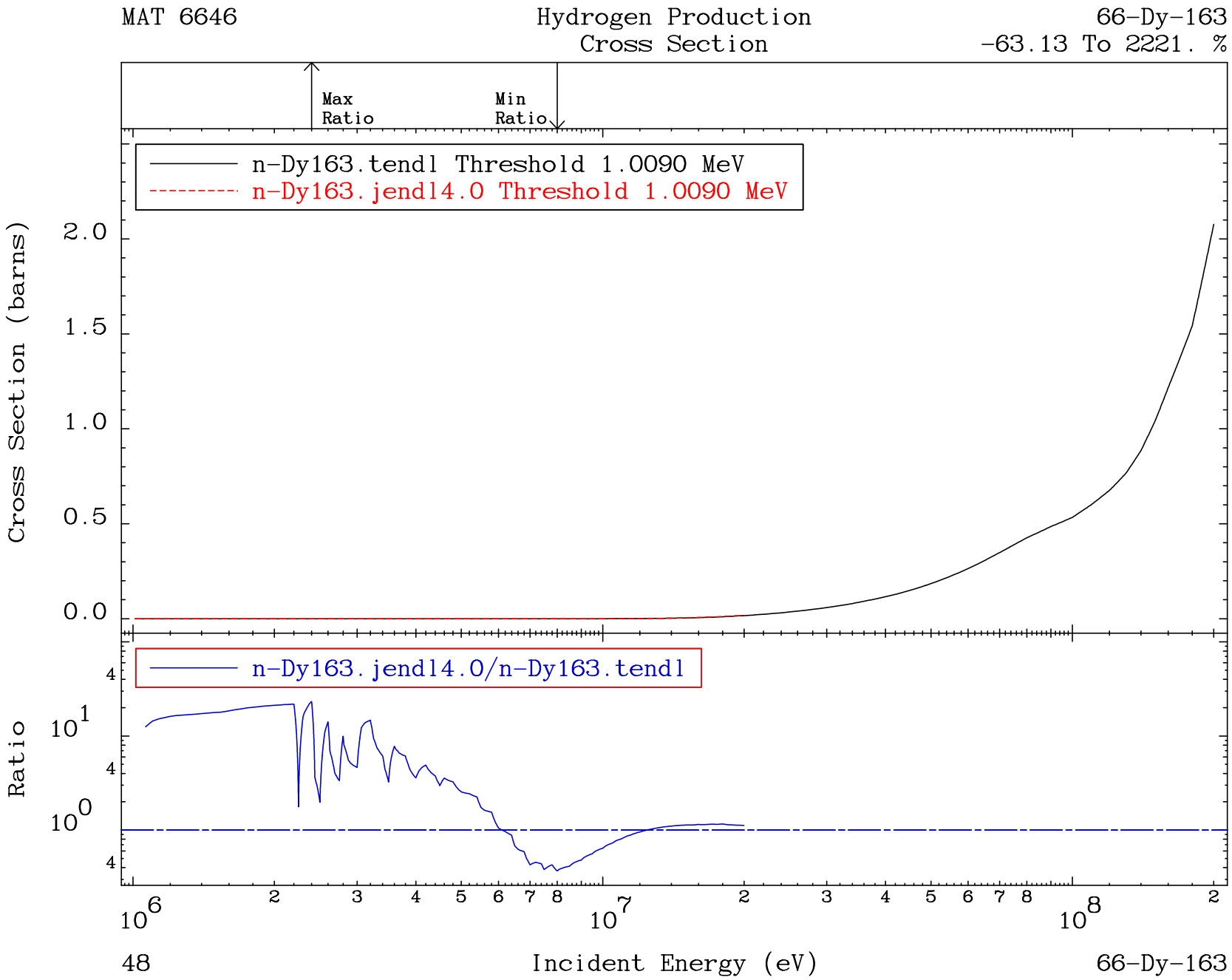

MAT 6646
(n,p)
Cross Section
66-Dy-163
-63.13 To 2221. %
Max Ratio
Min Ratio
n-Dy163.tendl Threshold 1.0090 MeV
n-Dy163.jendl4.0 Threshold 1.0090 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^1
10^0
4
4
4
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
43
Incident Energy (eV)
66-Dy-163

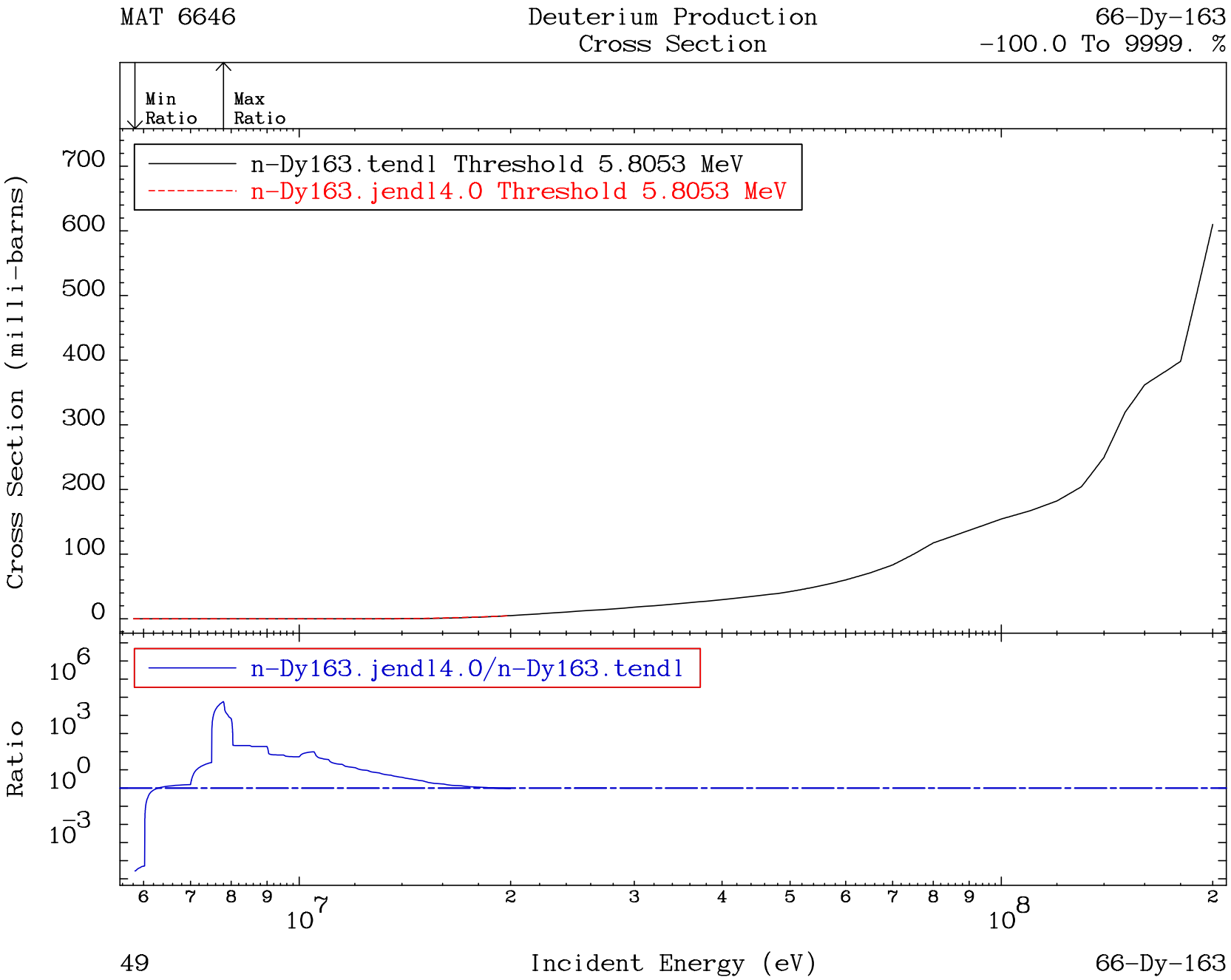

MAT 6646
(n,d)
Cross Section
66-Dy-163
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 5.8053 MeV
n-Dy163.jendl4.0 Threshold 5.8053 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^{6}
10^{3}
10^{0}
10^{-3}
6 7 8 9 10^{7} 2 3 4 5 6 7 8 9 10^{8} 2
44
Incident Energy (eV)
66-Dy-163

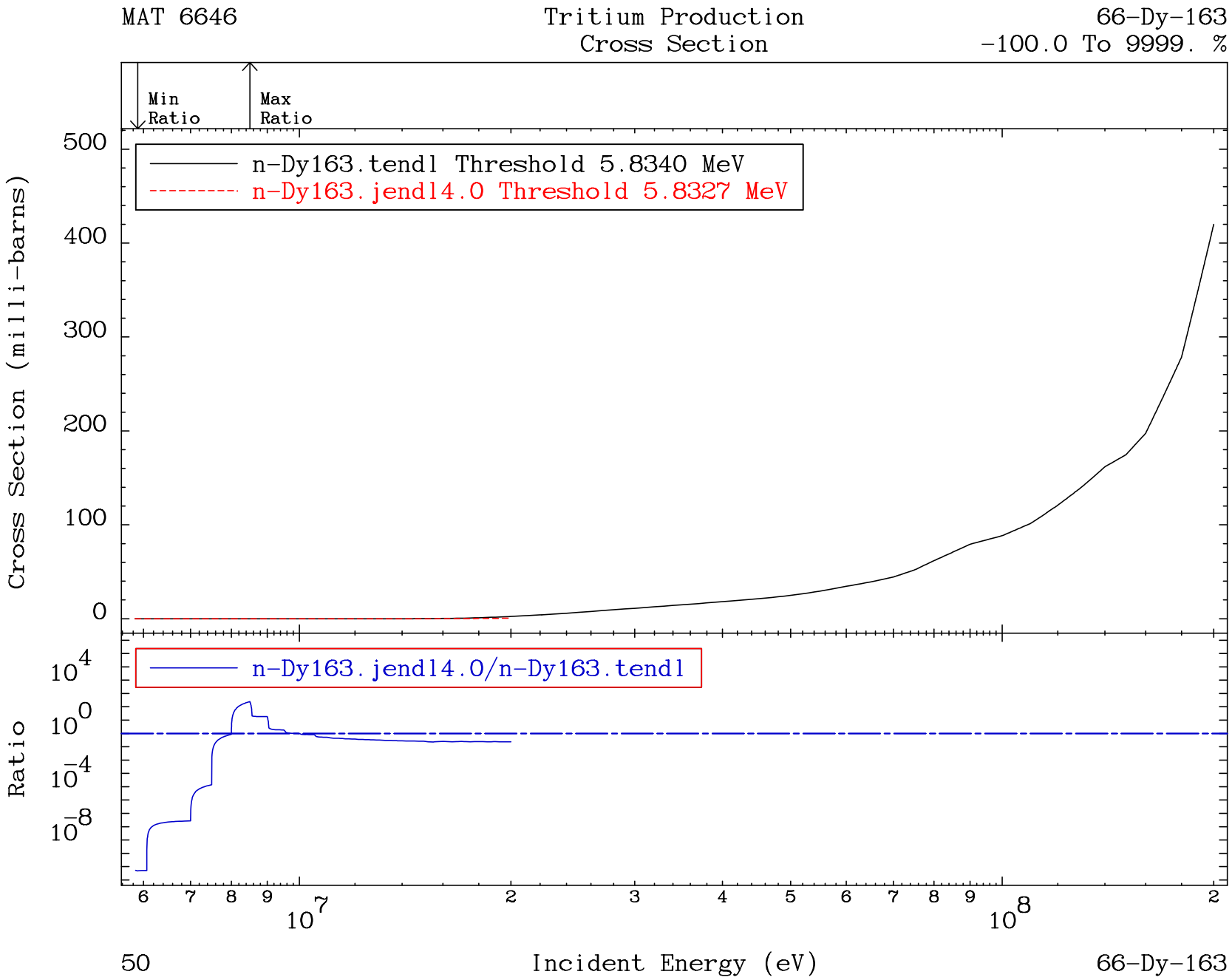

MAT 6646
(n,t)
Cross Section
66-Dy-163
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 5.8340 MeV
n-Dy163.jendl4.0 Threshold 5.8327 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^4
10^0
10^-4
10^-8
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
66-Dy-163

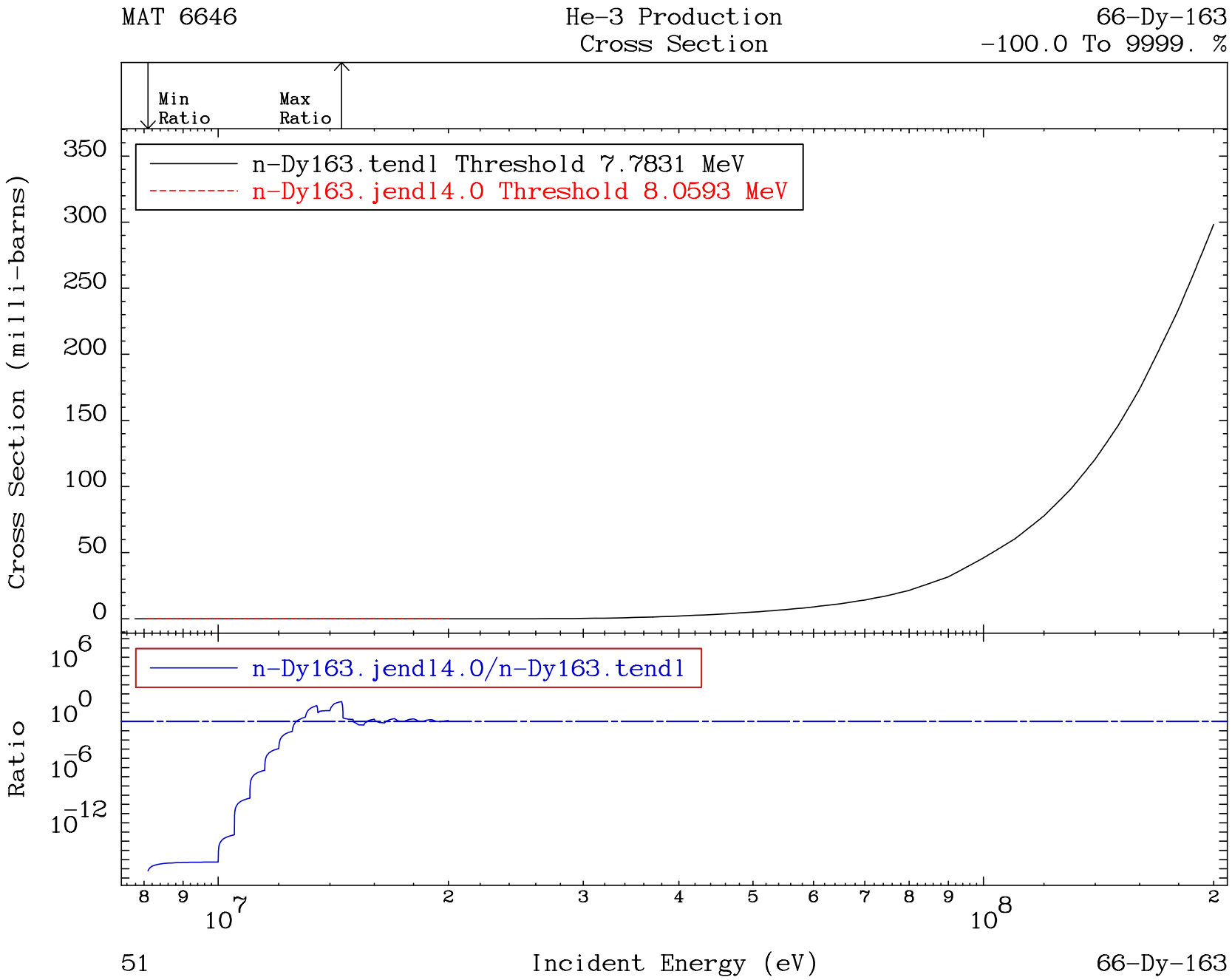

MAT 6646
(n,He-3)
Cross Section
66-Dy-163
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 7.7831 MeV
n-Dy163.jendl4.0 Threshold 8.0593 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^0
10^-6
10^-12
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
66-Dy-163

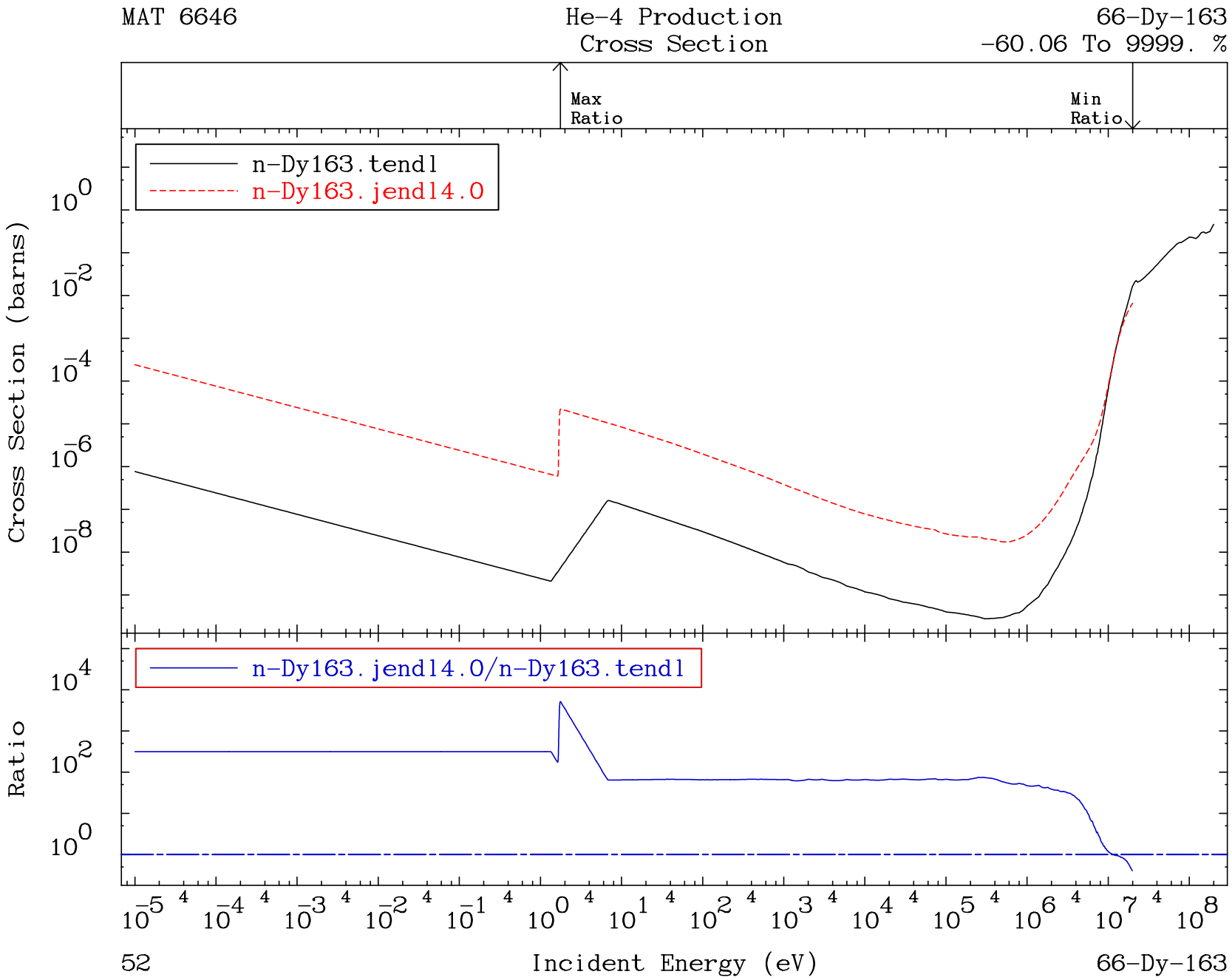

MAT 6646
(n,α)
Cross Section
66-Dy-163
-63.50 To 9999. %
Max Ratio
Min Ratio
n-Dy163.tendl
n-Dy163.jendl4.0
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
47
66-Dy-163

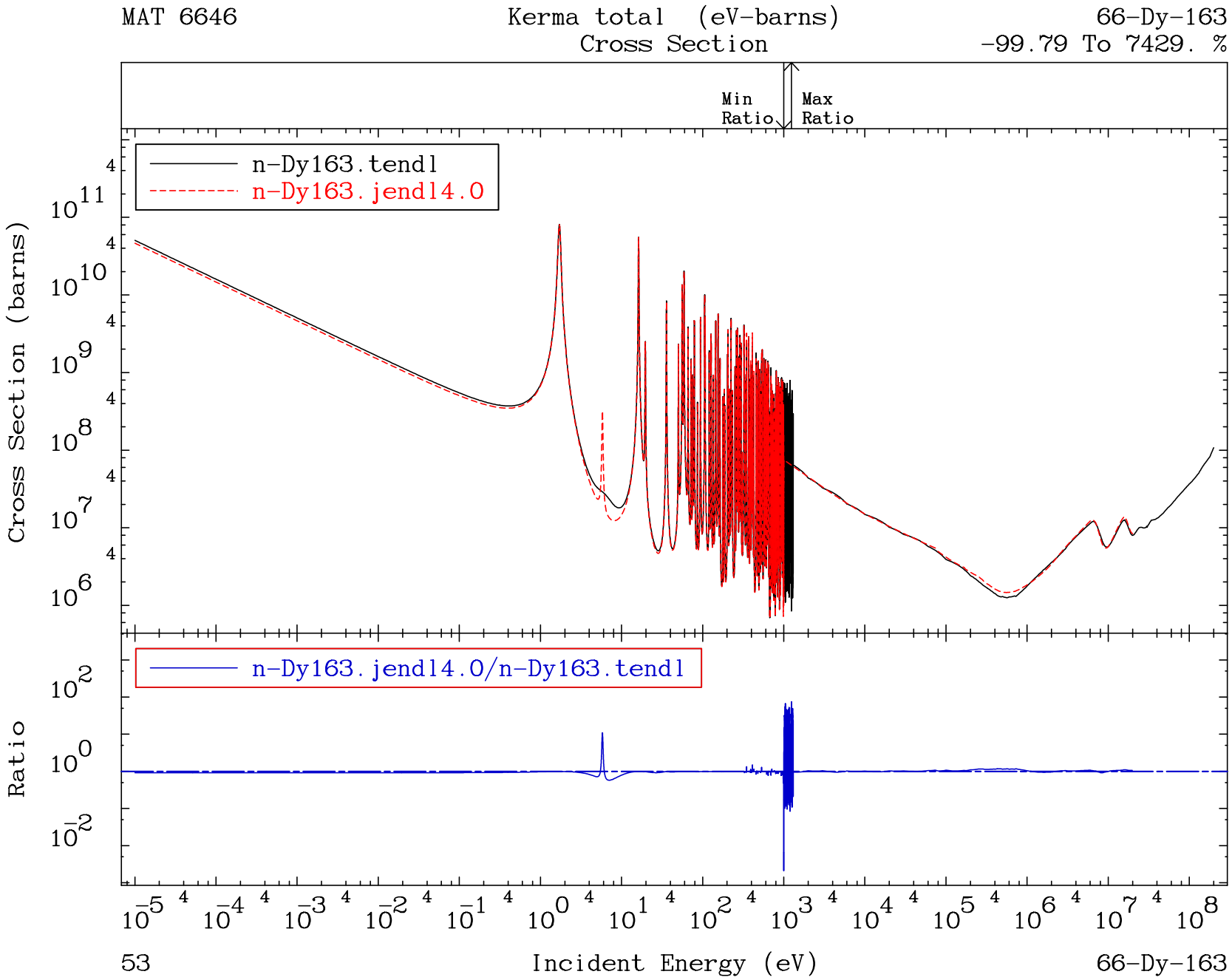

MAT 6646
Hydrogen Production
Cross Section
66-Dy-163
-63.13 To 2221. %
Max Ratio
Min Ratio
n-Dy163.tendl Threshold 1.0090 MeV
n-Dy163.jendl4.0 Threshold 1.0090 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^1
10^0
4
10^6
10^7
10^8
2 3 4 5 6 7 8
48
Incident Energy (eV)
66-Dy-163

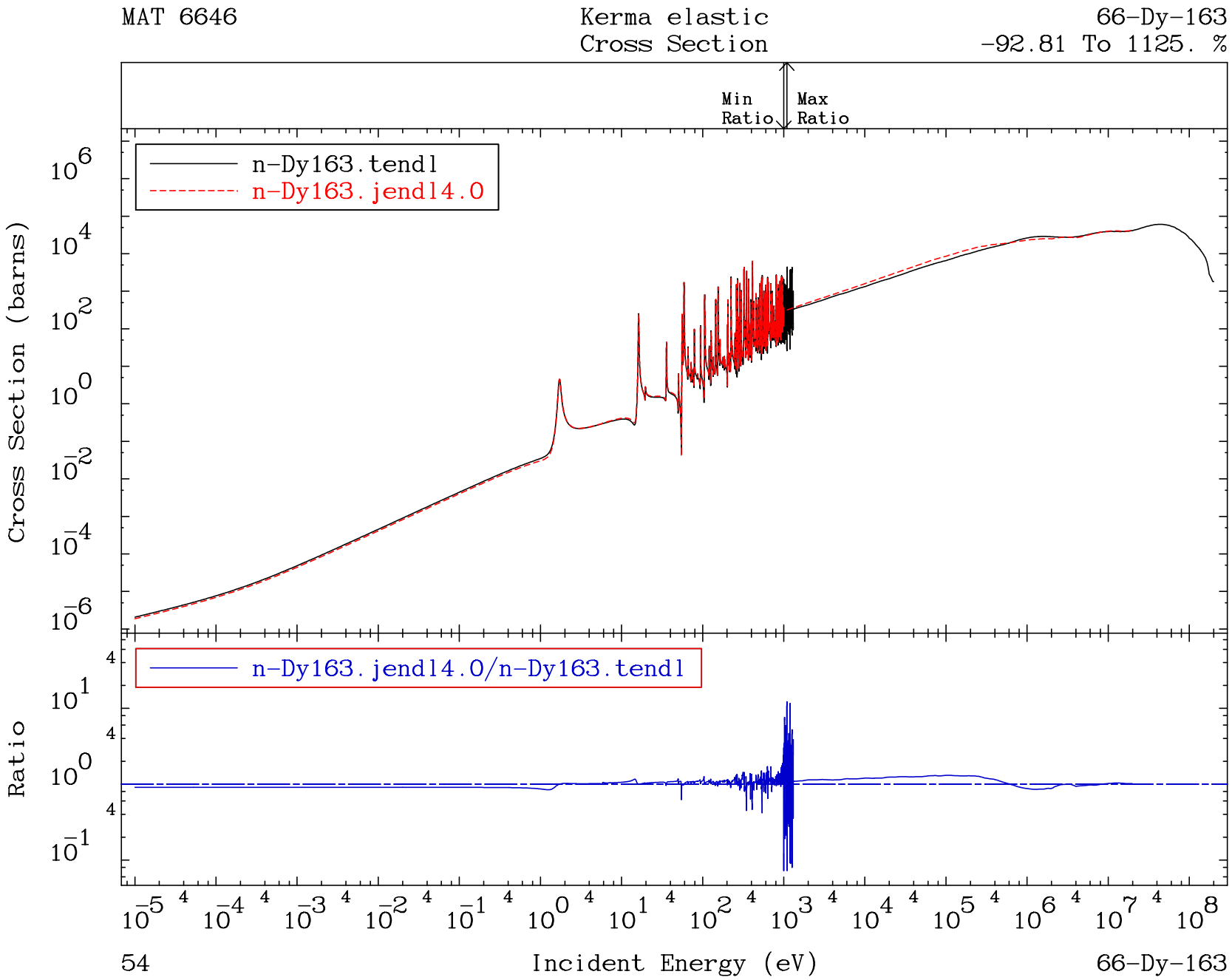

MAT 6646
Deuterium Production
Cross Section
66-Dy-163
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 5.8053 MeV
n-Dy163.jendl4.0 Threshold 5.8053 MeV
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^3
10^0
10^-3
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
49
Incident Energy (eV)
66-Dy-163

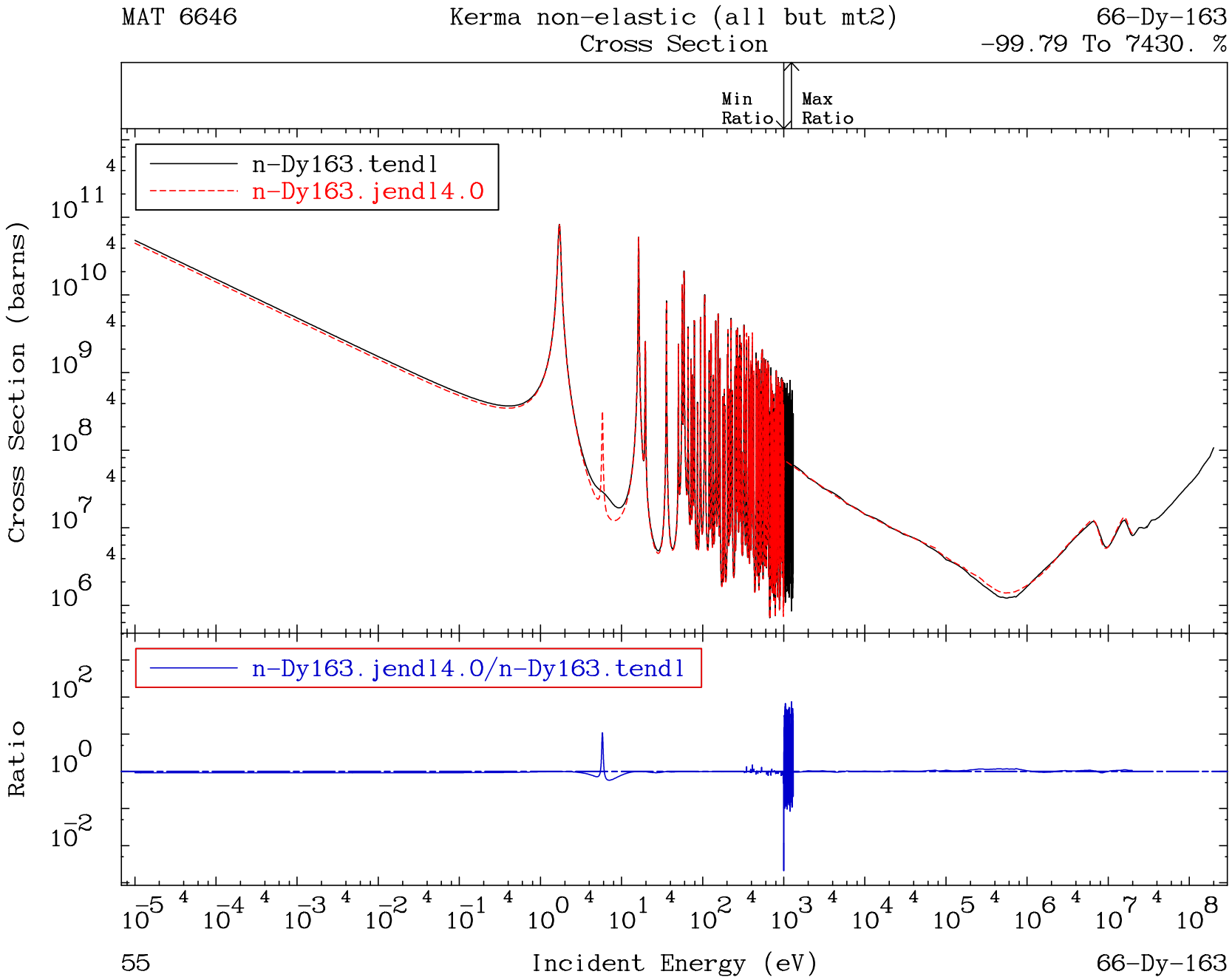

MAT 6646
Tritium Production
Cross Section
66-Dy-163
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 5.8340 MeV
n-Dy163.jendl4.0 Threshold 5.8327 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^4
10^0
10^-4
10^-8
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
50
Incident Energy (eV)
66-Dy-163

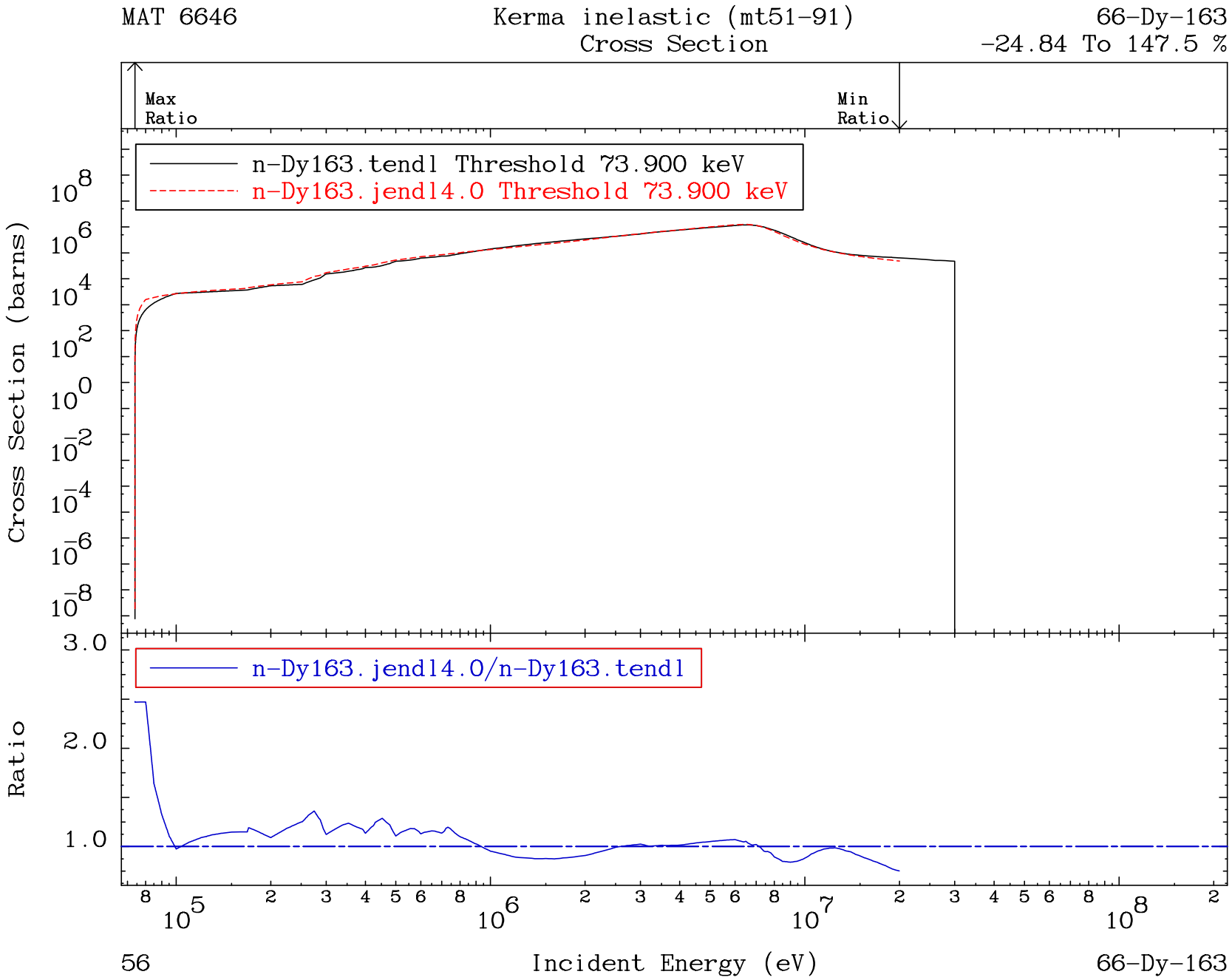

MAT 6646
He-3 Production
Cross Section
66-Dy-163
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl Threshold 7.7831 MeV
n-Dy163.jendl4.0 Threshold 8.0593 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
10^6
10^0
10^-6
10^-12
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
51
Incident Energy (eV)
66-Dy-163

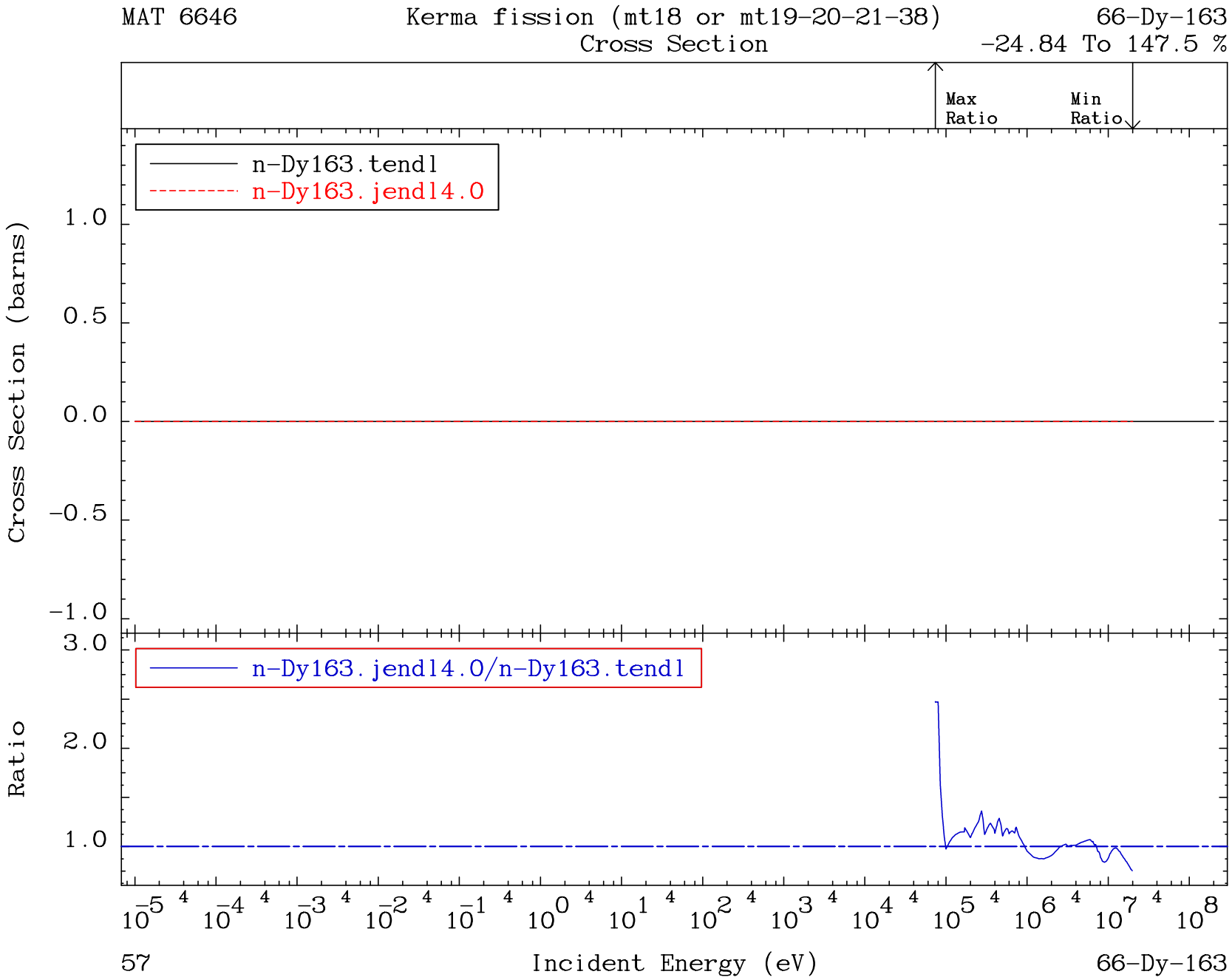

MAT 6646
He-4 Production
Cross Section
66-Dy-163
-60.06 To 9999. %
Max
Ratio
Min
Ratio
n-Dy163.tendl
n-Dy163.jendl4.0
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
52
66-Dy-163

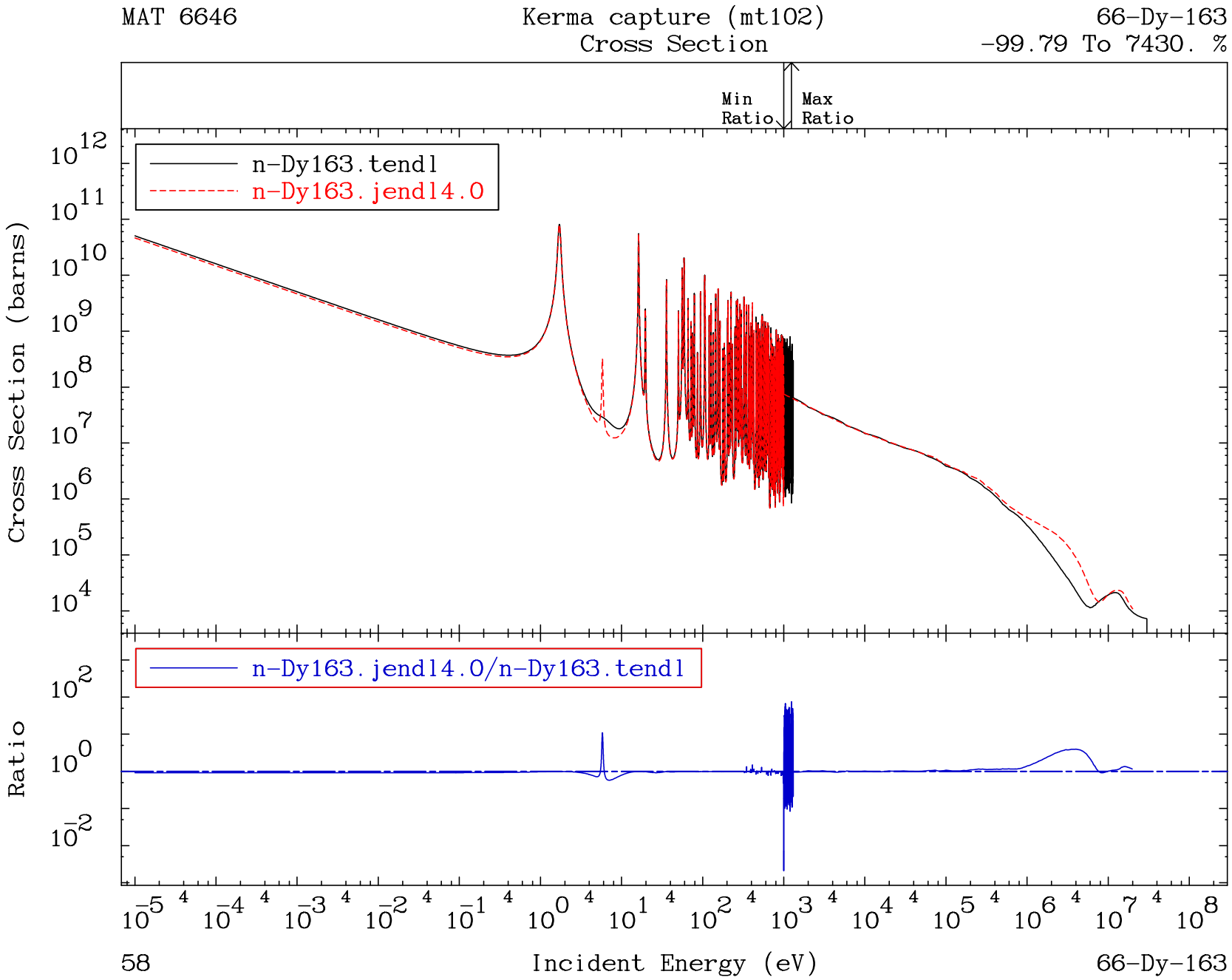

MAT 6646
Kerma total (eV-barns)
Cross Section
66-Dy-163
-99.79 To 7429. %
Min Ratio
Max Ratio
n-Dy163.tendl
n-Dy163.jendl4.0
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
53
66-Dy-163

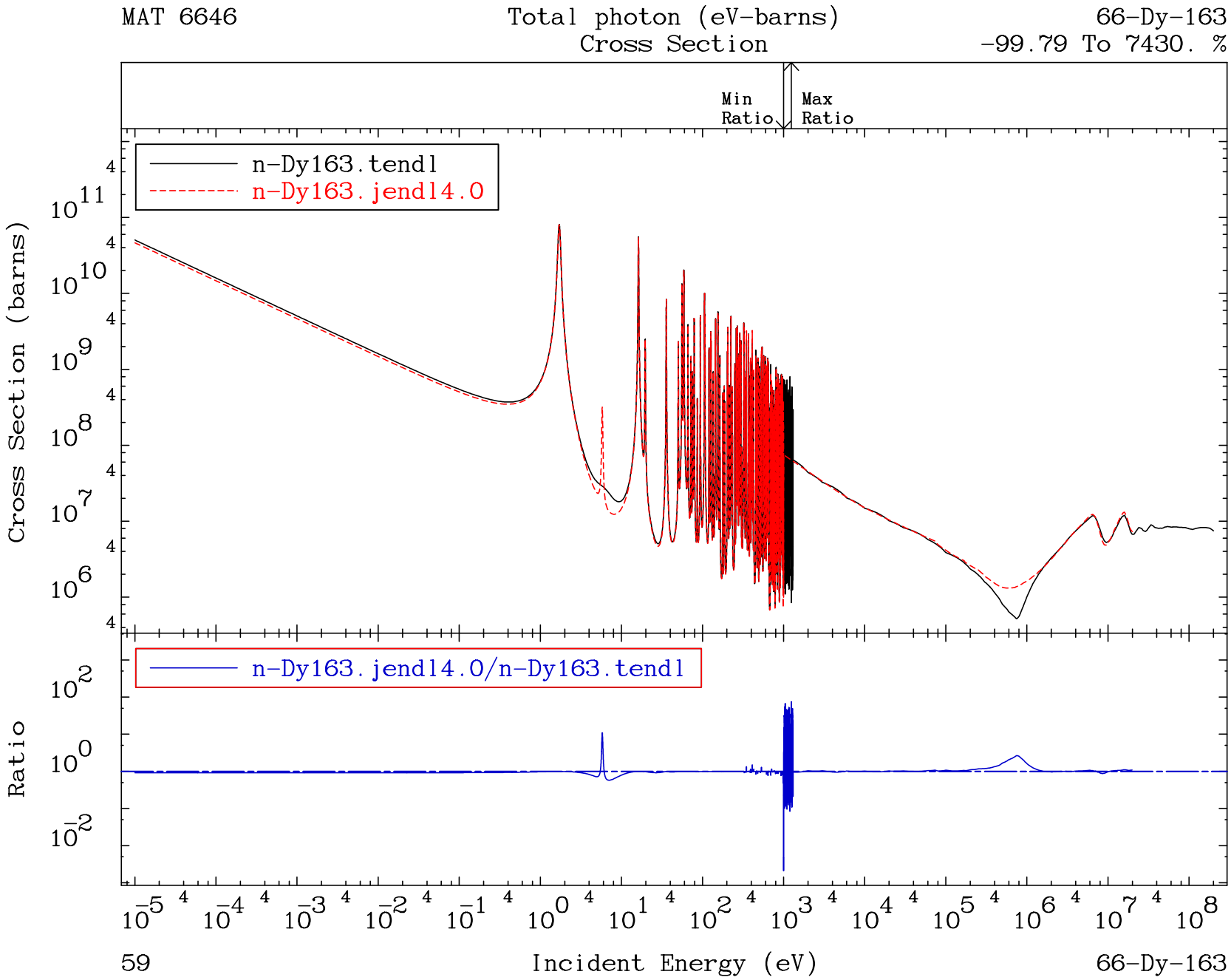

MAT 6646
Kerma elastic
Cross Section
66-Dy-163
-92.81 To 1125. %
Min Ratio
Max Ratio
n-Dy163.tendl
n-Dy163.jendl4.0
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
54
66-Dy-163

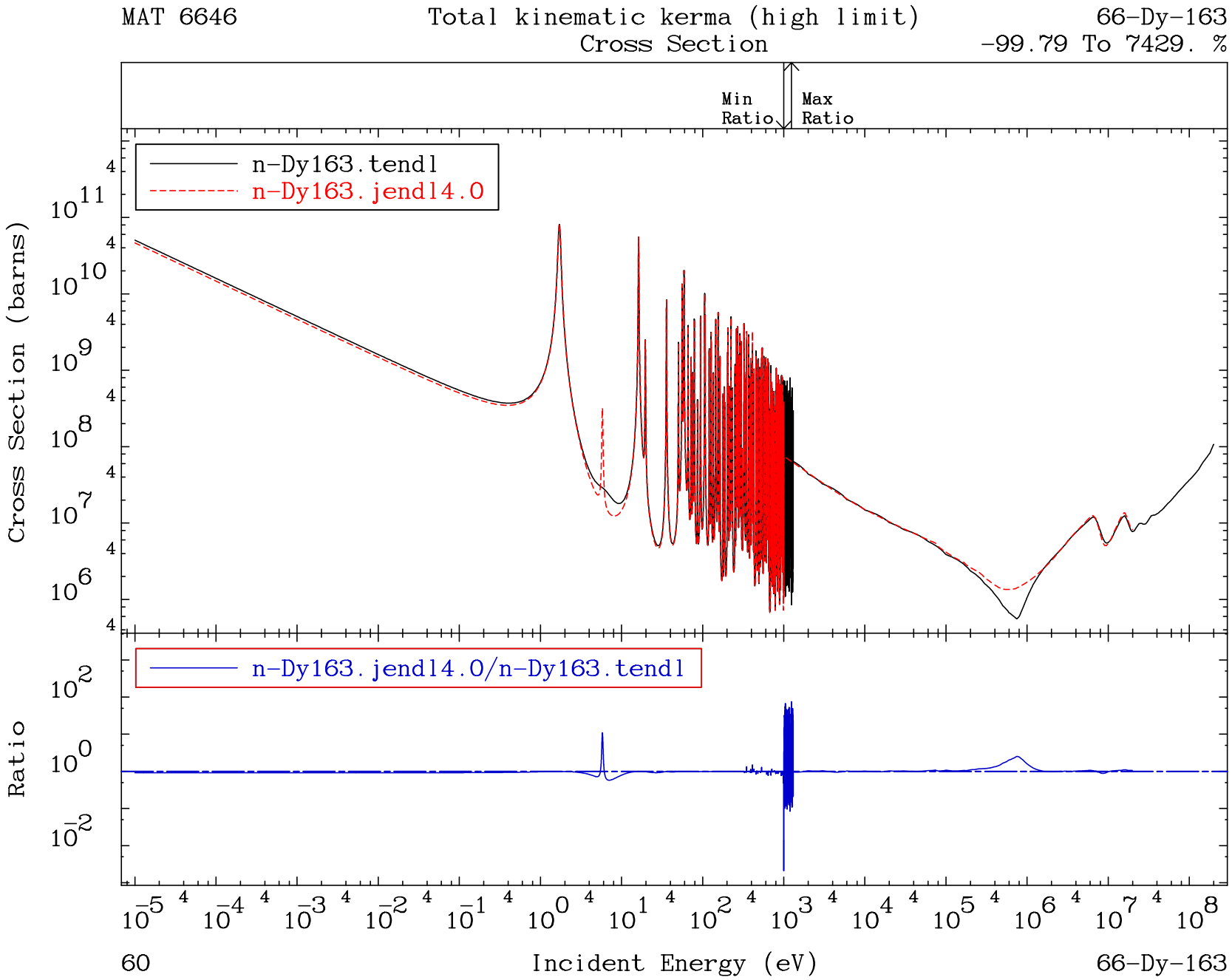

MAT 6646
Kerma non-elastic (all but mt2)
Cross Section
66-Dy-163
-99.79 To 7430. %
Min Ratio
Max Ratio
n-Dy163.tendl
n-Dy163.jendl4.0
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
55
66-Dy-163

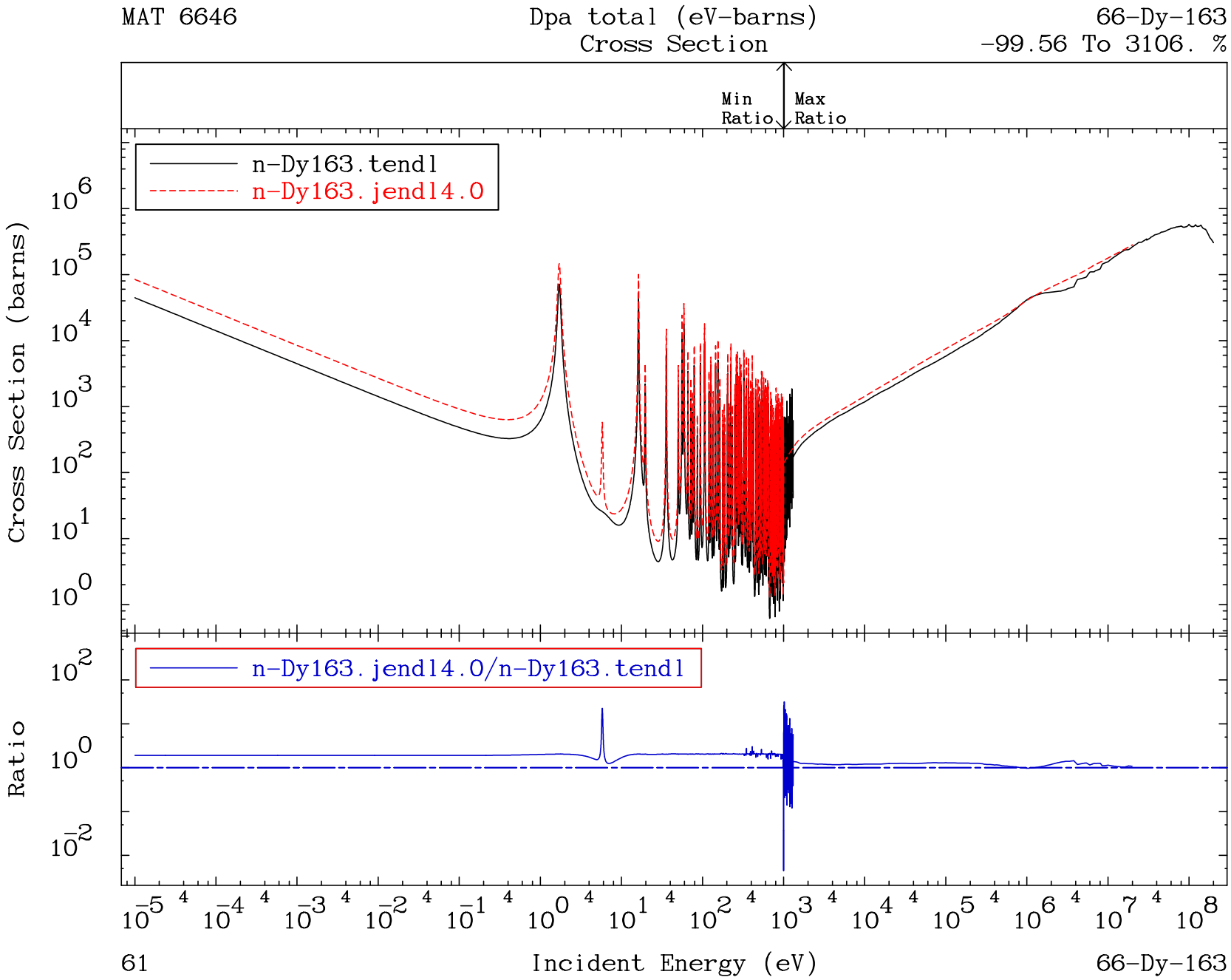

MAT 6646
Kerma inelastic (mt51-91)
Cross Section
66-Dy-163
-24.84 To 147.5 %
Max Ratio
Min Ratio
n-Dy163.tendl Threshold 73.900 keV
n-Dy163.jendl4.0 Threshold 73.900 keV
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
56
66-Dy-163

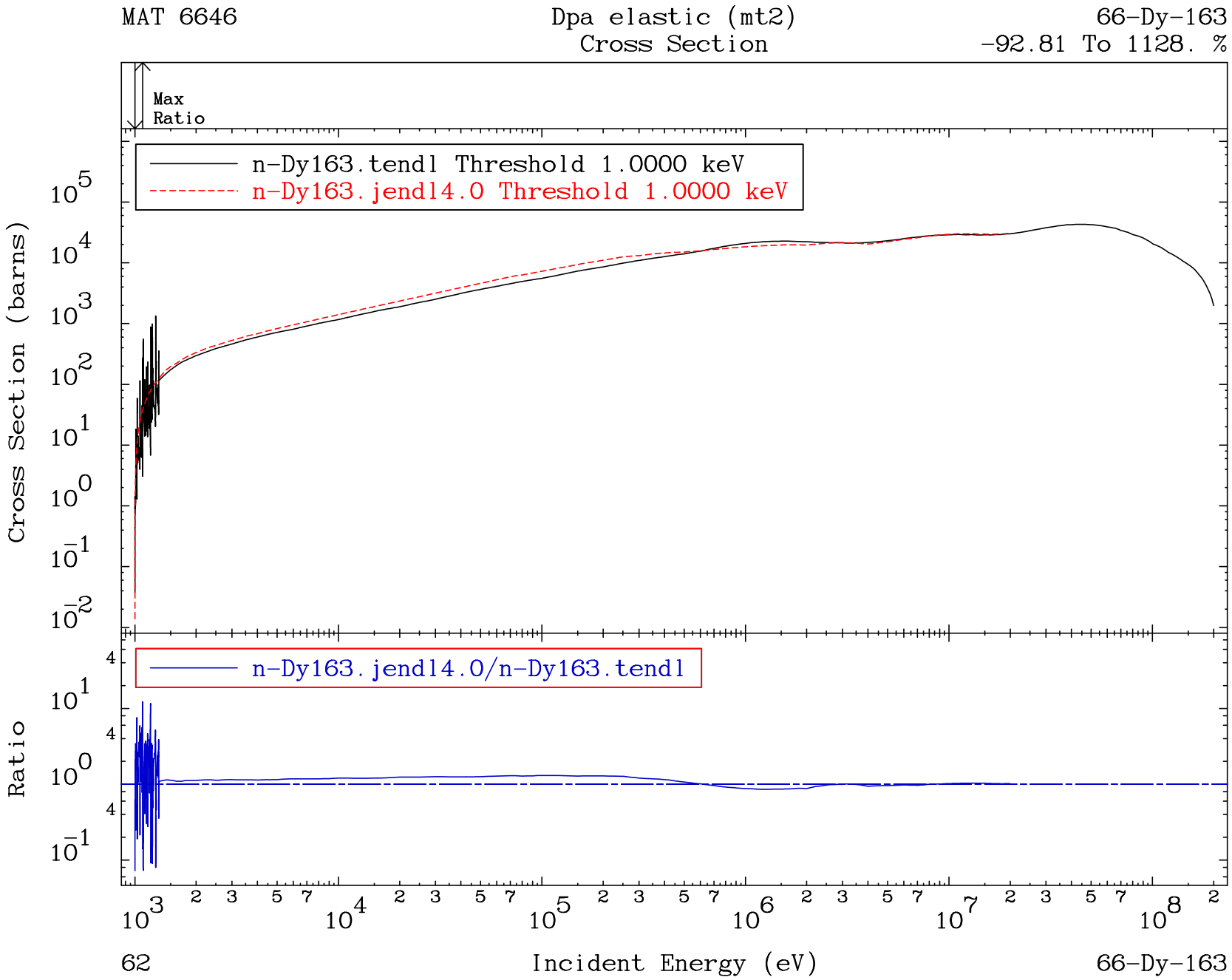

MAT 6646
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
66-Dy-163
-24.84 To 147.5 %
Max Ratio
Min Ratio
n-Dy163.tendl
n-Dy163.jendl4.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
3.0
2.0
1.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
57
Incident Energy (eV)
66-Dy-163

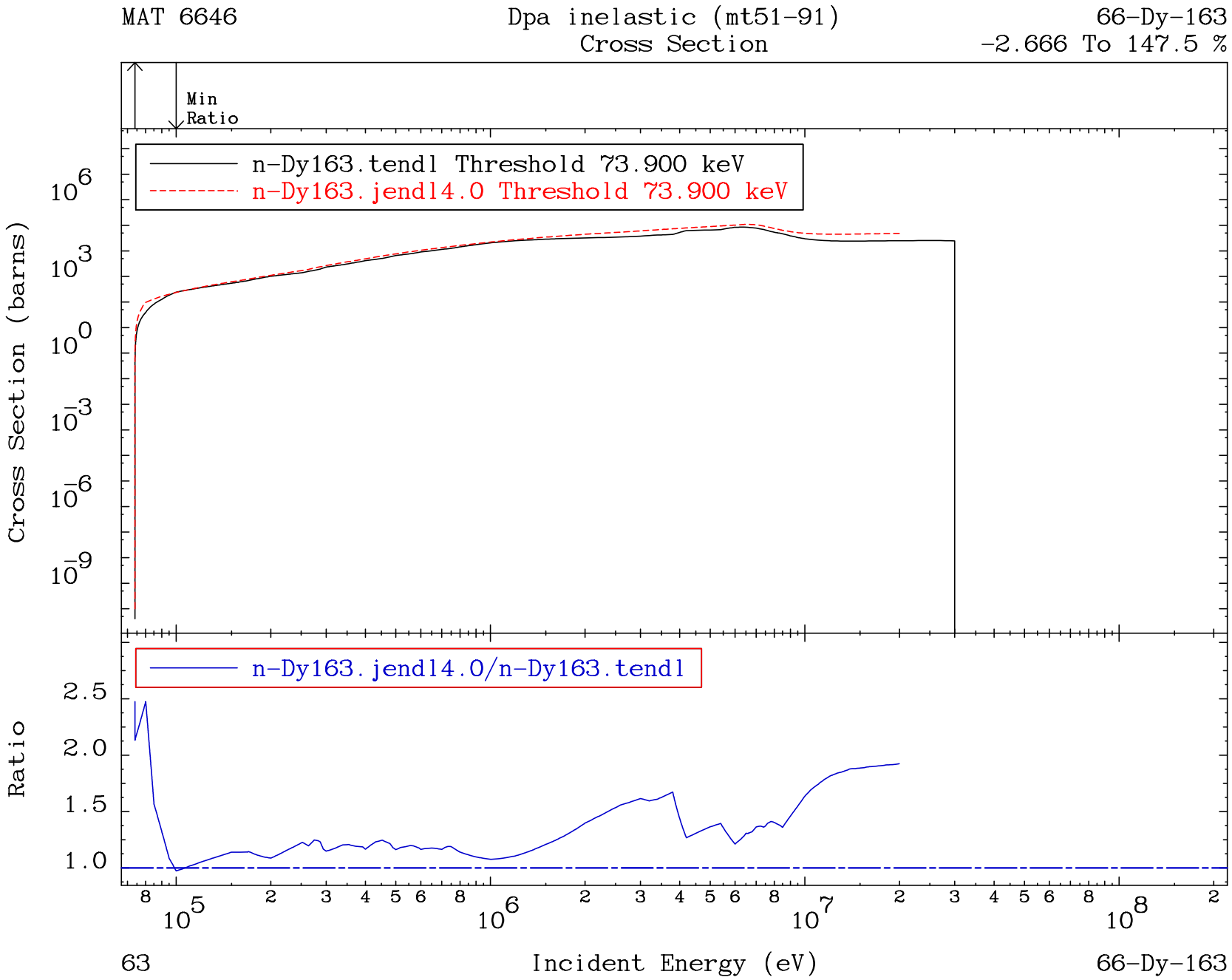

MAT 6646
Kerma capture (mt102)
Cross Section
66-Dy-163
-99.79 To 7430. %
Min Ratio
Max Ratio
n-Dy163.tendl
n-Dy163.jendl4.0
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
58
Incident Energy (eV)
66-Dy-163

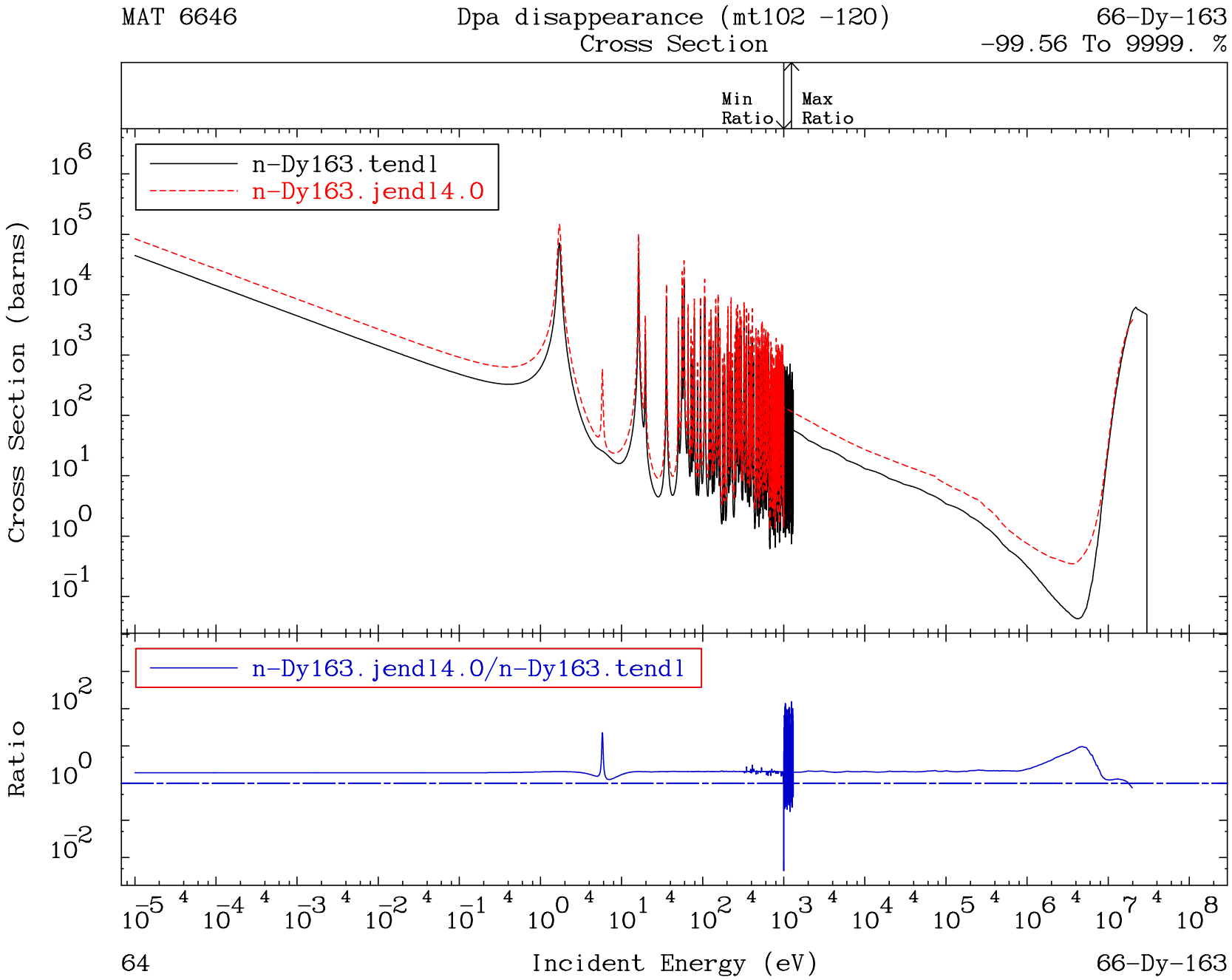

MAT 6646
Total photon (eV-barns)
Cross Section
66-Dy-163
-99.79 To 7430. %
Min Ratio
Max Ratio
n-Dy163.tendl
n-Dy163.jendl4.0
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
59
Incident Energy (eV)
66-Dy-163


MAT 6646
Total kinematic kerma (high limit)
Cross Section
66-Dy-163
-99.79 To 7429. %
Min Ratio
Max Ratio
n-Dy163.tendl
n-Dy163.jendl4.0
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
60
66-Dy-163


MAT 6646
Dpa total (eV-barns)
Cross Section
66-Dy-163
-99.56 To 3106. %
Min Ratio
Max Ratio
n-Dy163.tendl
n-Dy163.jendl4.0
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
61
66-Dy-163


MAT 6646
Dpa elastic (mt2)
Cross Section
66-Dy-163
-92.81 To 1128. %
Max
Ratio
n-Dy163.tendl Threshold 1.0000 keV
n-Dy163.jendl4.0 Threshold 1.0000 keV
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
62
66-Dy-163


MAT 6646
Dpa inelastic (mt51-91)
Cross Section
66-Dy-163
-2.666 To 147.5 %
Min
Ratio
n-Dy163.tendl Threshold 73.900 keV
n-Dy163.jendl4.0 Threshold 73.900 keV
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
63
66-Dy-163


MAT 6646
Dpa disappearance (mt102 -120)
Cross Section
66-Dy-163
-99.56 To 9999. %
Min Ratio
Max Ratio
n-Dy163.tendl
n-Dy163.jendl4.0
Cross Section (barns)
n-Dy163.jendl4.0/n-Dy163.tendl
Ratio
Incident Energy (eV)
64
66-Dy-163